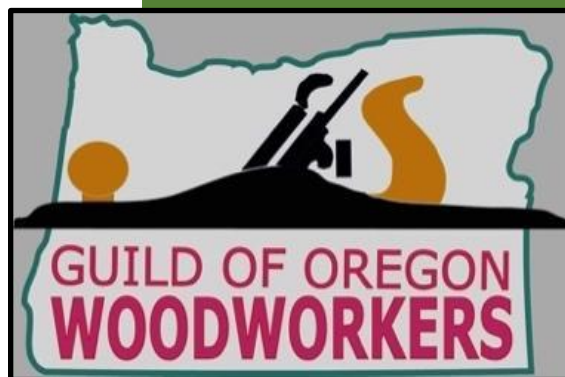


Guild of Oregon Woodworkers ***SAFETY MANUAL***



FEBRUARY 2021

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Safety First

Introduction

The Guild Shop (Shop) is located in the Multnomah Village area of Portland. It includes three workspaces:

1. A Bench room that includes multiple work benches, hand tools and portable electric tools.
2. A Machine Room that includes multiple woodworking machines, including many of professional or industrial quality.
3. An annex that is used primarily for storage.

The Shop is intended to provide educational and personal woodworking opportunities for its members. This Safety Manual has been developed in order to describe the requirements in place in the Shop to promote the following goals:

1. That members use the facility in a manner that best promotes the personal safety of themselves and others; and
2. That members use the equipment in a manner that is consistent with the basic purpose of the machine and minimizes machine wear and damage.

Merely reading this manual and answering the question on the shop safety test do not necessarily make you a safe wood worker. Nothing is more important than gaining experience with the machines in the shop. To that end, the Guild offers and encourages members who are interested in using the shop to take one of the several skills classes (educational offerings) in addition to the basic safety training.

We ask for everyone's cooperation in making the shop a safe place to work and learn.

Safety First

Safety Statement

The Guild of Oregon Woodworkers recognizes that there are safety and health hazards associated with woodworking shop activities. The Guild wants all users to benefit from the use of the machine shop and bench room without harm to the user or other people in the shop. The principal safety hazards common to woodworking are:

- Machine hazards
- Point of operation – contact with sharp edges
- Rotary and reciprocating movements
- In-running rip points (pinch points)
- Kickbacks – when saw seizes the stock and hurls it backwards
- Flying chips and material from machinery
- Tool projection – parts thrown from tool failure
- Fire and explosion hazards

Most safety hazards are associated with long-term exposure. These principal safety hazards common to woodworking are:

- Noise
- Vibration
- Wood dust – carcinogens
- Chemical hazards – from exposure to coatings, finishes, and adhesives, and solvent vapors

The shop user has primary responsibility for their personal safety. The shop user is required to be knowledgeable in the equipment used, follow shop guidance, assess risks of each operation, wear personal protective equipment, and maintain an orderly workplace. The Guild supports safe operations with:

- Training
- Safety Manual and equipment operation standard requirements
- Requirement for using personal protective equipment
- Maintenance of machinery and implementation of physical safeguards
- Posting of warning signs and maintaining first aid kits
- Dust control system
- Requirement to maintain good housekeeping
- Investigation of accidents to determine causes and prevent similar incidents
- Shop attendant oversight and safety enforcement

Safety First

The purpose of this guide is to familiarize users with the hazards of woodworking and the control options for protecting shop users from these hazards. The Guild is committed to preventing workplace injuries and protecting users while they are working in the machine and bench rooms by providing the users with the knowledge and skills so that they may take the responsibility for working safely.

Safety First

Safety Program & Volunteers

The Safety Program is part of the Operations Program for the Shop. It ensures the safe operation and safety culture of the Shop. The Safety Program includes:

- The investigation of all Shop Incidents and the establishment of safety standards;
- Coordinating the delivery of Machine Use and Safety classes with the Education Program;
- Printing, tracking and distributing Shop cards;
- Up to date maintenance of the Guild Safety Manual;
- Ensuring that the First Aid kits in the shop are fully stocked and accessible; and
- Providing safety training to Guild members.

The management of the Safety Program is under the direction of the Safety Committee Chair (Lead).

Safety Committee

The Safety Committee meets on a regular basis and includes representatives from various programs in the Guild. The committee is composed in a manner that creates connections with other programs through liaison representatives. The Safety Chair (Lead) also reports regularly to the Guild Board of Directors.

Specific goals:

- Ensure the existence of Safety guidelines and culture within the Guild
- Promote Making Safety a Priority
- Ensure Members are Trained in Safety Before Using the Shop
- Meet the Need for First Aid Equipment and Detailed program description

Trainers

All safety training will be delivered by Trainers who have been trained and assigned by the Education Program.

SHOP ATTENDANTS (SAs)

When the shop is being utilized in a manner that requires equipment use, the supervision of members will be carried out by volunteer Shop Attendants. If in doubt about how to use a piece of equipment, ask an SA.

Safety First

The Shop attendant will be at least an intermediate woodworker and have the ability and knowledge to safely use the following tools: Table Saw, Jointer, Planer, Band Saw, Router & Router Table, Power Sanders, Drill Press, and the hand tools supplied by the Guild.

While on duty, the SA's primary responsibilities are:

1. Monitoring the safety of all users of the Guild workshop. To this end, the SA will assess each user's experience and skill with the tools they are using and the operations they seek to perform, and monitor the user to ensure that they are working in a safe manner.
2. Mentoring shop users as appropriate.
3. Shop maintenance, including cleanliness and routine machine maintenance, when the responsibilities listed above allow.

The SA will be the official representative of the Guild during the 4-hour shift. Shop attendants are not to be distracted by working on personal projects. The SA will follow the "Shift Start & End" procedures as laid out in the Shop Attendants Handbook and posted in the shop. The SA will maintain the written Guild Shop Log by listing all members present in the shop and recording any unusual events during the shift.

For more information on Shop Attendants, see the Shop Attendant Handbook.

Safety First

Guild Shop Safety Standards

To use the Guild's power tools in the Machine room you must...

1. Be a current Guild member
2. Have completed the Safety Training Requirements (see [Safety Training](#))
3. Be fully familiar with
 - a. [Shop user protocols and Guideline](#)
 - b. [Safety Standards](#)
 - c. [Material Guidelines](#)
4. Have a [Liability Release](#) on file.

This is the Guild Shop. It is different from your home shop or workplace, and these safety standards may differ from your practices in those environments. The Shop is equipped and organized to accommodate a large number of users with a wide range of skills.

It is mandatory that all users, from novice to professional, abide by the same safety standards and practices.

See a hazard? Stop work and notify the Shop Attendant.

Always know the machine/tool you are using and use it for the intended purposes ONLY.

Follow all rules for personal protective equipment (PPE).

Every machine should be unplugged before changing any blades or cutters. Turn off the machine if you leave it.

Take a moment; focus; then use the machine/tool. Give it your undivided attention.

You are the person most responsible for your own safety.



Safety First

Fatigue, monotony and over-confidence cause accidents. Stop if this describes you.

It's our "Rule of 3's": Hands 3" from the blade or cutter and 3' between users.

Remove dust from the air by using the dust collection equipment.

Saws present a serious danger of kickback. Do not force the wood. Stay out of the path of possible kickback and use good practice to prevent it.

Take the time to clean up and keep the work area tidy. Clutter creates danger.

It doesn't have to be a machine. Injuries result from poorly maintained or improperly used chisels, planes, saws and screwdrivers. Use every tool carefully.

ADDITIONAL TIPS:

1. It doesn't have to be a machine. Injuries result from poorly maintained or improperly used chisels, planes, saws and screwdrivers. Use every tool carefully.
2. Gloves should not be used when directly operating machinery.
3. All users should feel empowered to stop work in the shop if they see a hazard that they believe may be a safety hazard for themselves or others.

Safety First

Use of Personal Protective Equipment (PPE) in the GOOW Shop

Machines used in woodworking are dangerous, particularly when used improperly or without proper safeguards. Workers operating woodworking equipment suffer the following common injuries: laceration, amputation, severed fingers, and blindness. Wood dust and the chemicals used in finishing are health hazards, and workers in this industry can suffer from skin and respiratory diseases.



The shop user has primary responsibility for their personal safety. The shop user is required to be knowledgeable in the equipment used, follow shop guidance, assess risks of each operation, wear personal protective equipment, and maintain an orderly workplace.

The term "personal protective equipment" refers to any device or garment worn to safeguard against injuries and/or the harmful effects of hazardous substances. A wide variety of effective PPE can be readily obtained to protect members' eyes, hearing, respiratory tracts, and body parts (for example, head, feet, hands, and arms).

REQUIRED PPE: The following will be mandatory for members working in the GOOW Machine Shop.

1. Users are required to wear Personal Protective Equipment for eye and hearing protection when in the shop machine room when any equipment is operating.

Eye Protection: Required eye protection will need to have a Z87 marking in the lens and be Impact Rated with the manufacturer's marking followed by a "+" sign. The safety glasses must have side protection to prevent injury from flying objects. Shop Users who wear prescription lenses while engaged in machine operation shall use prescription safety lenses that have the Z87 marking in the upper/outer corner of the lens and provides side protection OR wears ANSI Z87 eye protection goggles that can be worn over the prescription lenses without disturbing the proper position of both lenses.

Hearing Protection: Users should choose a type that is reasonably comfortable to wear. It includes muffs, plugs, canal covers and custom plugs (contrary to what some believe, noise

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cancellation is not hearing protection unless it comes with NRR (noise reduction rating). The NRR does NOT indicate an equal reduction in decibels. There is a formula that must be used. Subtract 7, then divide the result by half. Example, an NRR of 30 ($30-7=23$, divided by 2 = 11.5). The actual reduction if worn properly is 11.5 decibels.

“Doubling up” – muffs over plugs, provides added protection and is good in louder environments, but is misleading. It does not double the protective rating, but does add about 4 decibels of protection.

2. Jewelry: Jewelry must be removed. In this case, jewelry is anything that could pose a risk of producing injury in the shop environment. The most common examples are watches, necklaces and bracelets. Wedding ring removal is not required but is highly recommended.
3. Clothing:—Wear clothes that match the environment you will be working in.
 - Tuck loose clothing in; confine dangling strings.
 - Hair long enough to obscure the eyes is confined;
 - Sturdy shoes, (no open toe, sandals or high heels).
 - No shirt, no shoes, no access.

RECOMMENDED PPE: It is strongly recommended that members do the following.

1. “Use respiratory protection when conditions warrant. Lung damage is a long term hazard.”

The Shop Attendant has the authority to determine that conditions are sufficiently dangerous regarding dust exposure that breathing protection becomes mandatory until the danger is sufficient lessened.

2. Rings should be removed for safety. De-gloving is a serious injury that can result from catching a ring in a moving blade.

Respiratory Protection: Typical respiratory protection PPE are disposable dust masks and reusable dust masks with filters. The mask one chooses should be comfortable, breathable, fit correctly, and have approval of the NIOSH, National Institute of Occupational Safety & Health. Proper care and storage of the masks is necessary for its continued effectiveness.

Different exposures require different types of protection. Respirators offer little to no protection when there is facial hair, even one days growth under the sealing edge.

While this Guild policy addresses the minimum Personal Protection equipment, these recommendations are not sufficient for all situations found in the Shop or with some woodworking practices.

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It is the user's responsibility to recognize an increased hazard and use all protective equipment that may be appropriate.

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SAFETY EVENT INVESTIGATION PROCEDURE

The purpose of an Incident Report is to facilitate documenting personal injuries and/or equipment damage. The form is an icon on the main shop computer screen and is a fill-able PDF. There is a button at the top of the form marked SAVE FORM. There is a directory on the main C drive labeled Incident Reports. There is a procedure on how to save the report and to email it to a predetermined distribution list.

A Shop Attendant will write an incident report for any injury, even one simply requiring a band aid, IF it was caused by machine. A chisel cut or splinter does not require an incident report if it can be treated with a band aid. Equipment damage such as SawStop cartridge activation, blade or cutter damage (e.g. metal in wood), torn sanding belt, etc, YES. A nicked chisel from an accidental drop, does not require an incident report. If in doubt, a report will be completed.

The intent is not to accuse nor to affix blame, rather we want to improve user safety and reduce damage. Incident reports provide a tool for determining if or where we should make changes. We are a large group of mostly amateurs and some damage is inevitable.

In the event that the computer is not available, there will be a supply of the new incident report forms in the filing cabinet. On the front of the folder, there will be a procedure for communicating the incident, including telephone numbers. As a part of the procedure when the computer is down, the Lead SA will enter the report from the written form and save the PDF on the computer when it is available. (See form in Appendix I)

At the Safety Committee's option, they may follow up and complete the Safety Committee Report Form and make any reports or recommendations to the board or the membership.

Initial Incident Report Form

SA Name: _____ Date of Report: _____

Time of Day: _____ Was 911 Called? Yes ___ No ___

What occurred? _____

Any Person directly Involved: _____

Any Additional witnesses: _____
(who else was in the shop) _____

What tools if any were involved? _____

Why did the person involved think it happened? _____

Any personal injury or property damage? _____

Any tool damage? Yes ___ No ___ Was the tool Locked out? Yes ___ No ___

Who was the incident reported to? _____
(board member, safety committee member, operations manager)

Safety First

Tool Safety and Operation Rules

CORE TOOLS



Band Saws

Safety and Operation Rules

The Band Saw has a thin vertical blade that allows cutting curves, resawing, and large depth cuts on thick material. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Band Saws. Failure to follow the safety rules will result in a loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the band saw with attention to the task at hand!
2. A-three foot perimeter around the saw should be kept clear of people, debris and sawdust that impairs traction or footing to avoid slips and falls.
3. Keep bystanders away from the right hand area of the saw. Broken blades have a tendency to fly out to the right.
4. Eye and hearing protection is required, dust protection is strongly recommended.
5. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
6. Give the work your undivided attention.

Band Saw Safety and Operational Safety Rules:

1. Always disconnect the power before changing the blade or performing any other maintenance operation.
2. Make all adjustments to the band saws while the machine is off and stopped.

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3. Operating instructions vary by make and model of band saw. Always check with the Shop Attendant before using a band saw that you have not used before. Currently, the Guild Shop has two band saws:
 - a. Felder 21" – Set up for resawing
 - b. Jet 18" – Set up for general use
 - c. Grizzly 14" Set up for general use
4. Follow the 3" rule from the blade; always keep fingers 3" from the path of the blade. To control the stock, use push sticks, feather boards, or any other safety device when cutting small or short stock.
5. The teeth of the band saw blade should point down toward the table.
6. See the Shop Attendant if you need to change blades.
7. Check the blade tension and tracking before starting. The blade should be 1/32" from the rear roller bearing behind the blade. See the Shop Attendant if the blade guides need adjustment.
8. The blade alignment tracking should be:
 - a. Felder 21" – Forward on the tire, so that the teeth do not touch the tire
 - b. Jet 18" - At the center of the wheels.
 - c. Grizzly 14" - At the center of the wheels.
9. Make sure that the upper and lower wheel guard doors are closed when running.
10. Keep the blade guard as low you can and still see the cutting line (1" or less).
10. Turn on dust collection and open blast gate before starting saw.
11. When cutting stock that will not sit flat on the table, you need to construct a jig to hold it stable. Ask the Shop Attendant if you are not sure how.
12. Keep a balanced stance at the band saw.
13. Cut at a moderate feed rate into the blade, do not force a cut.
14. Cut relief cuts prior to cutting a long or tight curve. The relief cuts will free the blade of the tension of the tight curve and the wood will fall away. The blade size will dictate the radius of the cut.
15. It is permissible to back out of a straight cut without shutting off the machine.
16. If the work is too large for one person, get help holding the stock.
17. When cutting with the table at an angle, clamp a block to the table to prevent your stock from slipping off the table.
18. Never clear small pieces while the blade is moving.
19. Always keep your fingers and hands away from the path of the blade, use a push stick.
20. Use a "V" block when cutting cylindrical stock.
21. Turn the power off immediately and stand clear if you hear a clicking sound or the blade breaks

Safety First

Core tool

Safety Tip Sheet: Bandsaw

Key Safety Issues

Keep Hands away from blade and workpiece stabilized:

- * Maintain straight flat reference surfaces against table and fence
- * Hold stock firmly & flat on table to keep stock from drawing fingers into blade
- * Use push stick to remove pieces between fence and blade
- * Adjust blade guard to just above (~1") the workpiece
- * If you need to stop cutting, hold stock firmly & wait for blade to stop

Set-up tips

- * Ensure blade is sharp, centered on wheels and under proper tension
- * Ensure blade is tracking correctly and runs free in guide rollers
- * Make sure fence is parallel to miter slot
- * Make relief cuts before attempting tight curves
- * Use taller fence and slow feed rate when resawing tall boards
- * Blade drifting causes: Dull blade, loose tension, pushing too hard

Clean-up & Default settings

- * Default blade is 1/2 inch and 3 tpi blade
- * Check for sawdust build-up in cabinet & vacuum area & saw as needed

SA notes

- * Contact SA if changing blades
- * Contact SA if blade tracking, guides or tension needs adjustment

Safety First



Jointers

Safety and Operation Rules

Jointers are used to make one edge or face of a board straight. They have high speed rotating knives that remove material as it is pushed past the rotating jointer knives. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Jointer. Failure to follow the safety rules will result in a loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the jointer with attention to the task at hand!
2. A three foot perimeter around the jointer should be kept clear of people, debris and sawdust that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Jointer Safety and Operational Rules:

1. Operating instructions are available. Always check with the Shop Attendant before using the jointer if you have not used it before.
2. Always make sure the machine is turned off and stopped before making any adjustments.
3. Make sure all adjusting handles are tight & locked, and check fence for square.
4. Turn on dust collector and open blast gate
5. Move the fence to different positions over the cutter head to avoid dulling the blades.
6. Never operate the jointer without guards.
7. Avoid cuts deeper than 1/8" per pass; 1/16" or less is the ideal depth of cut.
8. Do not joint stock less than 16" in length.

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9. Do not joint stock narrower than 3" without a push stick.
10. Do not surface stock wider than the blades are long.
11. Do not face joint stock thinner than 5/8".
12. Never pass your hands directly over the cutter head. When face jointing, use a push block ***in between*** your hand and the stock.
13. Avoid tip-in. Never apply pressure to stock directly over the cutter head. This may result in tipping the board or your fingers into the cutter.
14. Always feed toward the out-feed table. Start jointing the board with all downward force on the in-feed table until the board has gone at least an inch onto the out-feed table. Finish jointing the board with all downward pressure on the out-feed table as the board leaves the in-feed table.
15. Use the left hand to hold down stock on the outfeed table; use the right hand for pushing stock.
16. Never push a board with your thumb.
17. Position your stance to allow you to walk through the cut with the board, especially on long boards. Never stand flat-footed facing the fence.
18. Always make sure that the exposed cutter head behind the fence is guarded, especially when you are jointing stock near the guard side of the cutter head.
19. Do not back your work out of the cut; keep going in the direction of the out feed table. Lifting your work off the blades is OK as long as you do it with good control. Do not let go or drop the board back into the blades.
20. If you are jointing long or heavy stock, make sure that you have help or use a stand to support the work.
21. Although the fence can be tilted, jointing of the stock at an angle could be difficult and cumbersome to hold. The use of push sticks and hold down devices is highly recommended. If possible, consider another machine for this operation if it cannot be done safely.
22. Before you walk away from the jointer make sure the machine is off & the blade has stopped.
23. Always run wood through the jointer with the grain in the same direction that you are cutting and never across the grain. Always examine the condition of the stock and evaluate the grain direction, warp, twist, burl, swirl, kink, and cup.
24. When straightening a cupped piece of stock the concave side should be down & the humped side up. It may take several passes to get a smooth surface. Then you will need to straighten other side of the stock with the thickness planer.

The Guild jointer, while bigger, is identical to jointers in home shops. The only difference is this machine is hard wired and therefore cannot be unplugged for blade changes. The main power must be on to allow the cutter head to rotate. When changing blades, on the 12 " Oliver jointer, turn off the circuit breaker marked Oliver Jointer, on the power wall. On the 8" Delta jointer, unplug the Delta Jointer. This will prevent the machine from starting.

Safety First

Safety Tip Sheet: Jointer

Key Safety Issues

Keep Hands and Fingers well away from cutter head:

- * Do Not pass hands within 3" or over cutters
- * Ensure that swing guard pushes against stock and returns to fence
- * Use push blocks to maintain safe distance from cutter on thinner stock
- * Maintain adequate downward & forward force on workpiece to keep control
- * Do Not joint stock less than 16" in length

Set-up tips

- * Check that fence is square to table
- * Set cutting depth to 1/16" or less
- * Focus pressure on infeed table then outfeed after 1/3 workpiece passes cutter
- * Check grain direction - joint downhill to avoid tearout
- * Cupped or concave face goes down on table
- * Joint face first then place face against fence - check for square

Clean-up & Default settings

- * Leave cut depth at 1/16 inch or less
- * Check for sawdust build-up in cabinet - vacuum area & jointer as needed
- * Move fence to **mid point** on table

SA notes

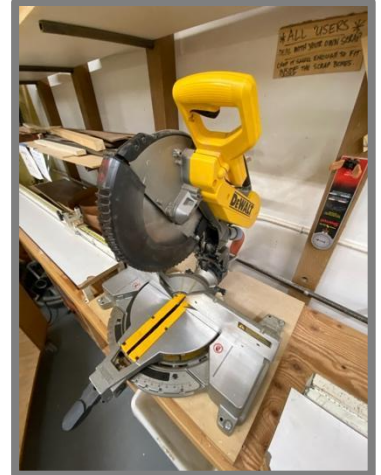
- * Contact SA if cutters are damaged or not cutting well
- * Ask SA for help when jointing large long stock

Miter/Chop Saw

Safety First

Safety and Operation Rules

The Miter Saw is a power tool used to make quick, accurate crosscuts, miters or bevels. These saws cut at a set miter angle. Some also can cut at both a miter and a bevel angle. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Miter Saw. Failure to follow the safety rules will result in a loss of shop privileges.



Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the miter saw with attention to the task at hand!
2. A three foot perimeter around the miter saw should be kept clear of people and debris that impairs traction or footing to avoid slips and falls.
3. Concentrate on what you are doing and be aware of kickback.
4. Eye and hearing protection is required, dust protection is strongly recommended.
5. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
6. Give the work your undivided attention.

Miter Saw Safety and Operational Rules

1. Always make sure the saw is turned off and the blade is stopped and in the full up position before all adjustments to the miter saw are made, including putting clamps on the work piece.
2. Make sure the blade teeth point down and toward the fence.
3. Never alter a guard or use the tool with a guard missing. Be sure all guards are in place and working properly before each use.
4. Never force a blade onto an arbor or alter the size of an arbor. If your blade does not have the proper size and shape arbor hole for the arbor, do not use it!
5. Make sure the arbor and blade are both clean. Buildup on the surface of the arbor and blade will create excessive friction.
6. Use sharp blades. Damaged or dull blades could throw teeth, causing a serious injury.
7. Notify the Shop Attendant if the blade requires cleaning or replacement.
8. Be sure the arbor nut is tight to prevent slipping or loosening of the blade.
9. Bolt or clamp the miter saw securely to a flat, level surface.
10. The miter saw has a dedicated vacuum. Be sure it is activated when the saw is switched on.
11. When you start your saw, allow the blade to reach full speed before cutting; do not force the blade and always start the cut gently.
12. Stop operating the saw immediately if you smell smoke.
13. When using a sliding compound miter saw, remember to pull the blade out and start the saw then push down into the stock and towards fence to make the cut.
14. Always place the work piece securely on the saw table and against the fence when making cuts.
15. Use clamps for pieces that will put your fingers within 3 inches from the saw blade. Never put clamps on when the blade is spinning.

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16. NEVER make freehand cuts. Holding the work piece by hand is unstable and may lead to loss of control.
17. Support long work pieces at the same height as the saw table.
18. NEVER reach under the saw blade or perform 'cross handed' operation.
19. Wait until the blade has completely stopped before removing the cut wood.
20. Don't raise the blade from the work piece until the blade has come to a complete stop.
21. Never try to remove or clamp the work piece to the saw while the blade is rotating.
22. Lock the miter saw in the down position when transporting.
23. Do not attempt to adjust or replace the blade without unplugging the Miter saw.

Safety First

Core tool

Safety Tip Sheet: Miter/Chop Saw

Key Safety Issues

- * Use caution with warped stock or boards that rock
- * Flip board to ensure contact under blade and/or against fence
- * Switch hands instead of crossing them
- * Keep fingers 3 inches away from the blade.
- * On miter & bevel cuts, keep hand out of narrow area between blade & fence

Set-up tips

- * Check for 90 degrees with square
- * Turn on switch with blade safely above workpiece
- * Let blade come to complete stop before moving the workpiece
- * Attach a stop to fence to cut multiple workpieces to same length.
- * Ensure auto-vacuum mode is working
- * Use work supports for long boards

Clean-up & Default settings

- * Lock blade in down position when done using
- * Check for sawdust build-up on saw - vacuum area & saw as needed

SA notes

- * Contact SA for any issues with saw

Safety First

Drill Presses

Safety and Operation Rules

The drill press comes in a floor or bench-mounted model. It has a motor driven head with a chuck that accepts bits or cutters. It also has an adjustable table on which the work is mounted. It is operated by pulling a handle which lowers the drill bit into material. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Drill Press. Failure to follow the safety rules will result in a loss of shop privileges.



the

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the drill press with attention to the task at hand!
2. A three foot perimeter around the drill press should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Drill Press Safety and Operational Rules

1. Make sure the drill press is off before making any adjustments.
2. Keep all guards and covers on the machine when it is on and running.
3. Make sure the size of the bit is equal to or less than the capacity of the drill press.
4. Do not exceed the recommended speeds for the type and size of drill bit being used or composition of the stock being drilled.
5. For drill bit speeds and sizes, and to adjust the speed of rotation, refer to the charts provided. If you cannot locate the charts, ask the Shop Attendant to assist you.
6. Center punch the drill-hole location into the stock.
7. Insert bit into drill chuck and tighten with the chuck key. Remove chuck key from the drill chuck before starting the drill press. Never leave the chuck key in the chuck.

Safety First

8. Use a clamp to secure the work when using a large diameter bit; when the work piece is small (6" or less); and when the table is at an angle. Never attempt to handhold small stock while drilling.
9. Drill into cylindrical stock using a "V" block.
10. Long stock should be drilled with the excess to the left of the operator. If the stock rotates it will hit the post, not the operator.
11. Support the underside of the stock to be drilled with a backer board secured to the drill press table.
12. Only start the machine with the table clear of everything except the stock you are drilling.
13. Keep hands and fingers at least 3" from rotating drill bits.
14. When drilling deep holes, frequently raise the drill bit from the hole to remove cuttings and cool the bit.
15. When you begin to break through the underneath side of the stock, ease up on the feed as to not tear the wood from the underneath side.
16. If a drill bit binds, turn off the drill press and carefully turn drill chuck backwards by hand to free the drill bit.
17. NEVER reach around or under a rotating drill bit or grab the chuck to stop a drill press. This can result in hand puncture or other serious injury.
18. Turn the drill press off before looking up or walking away from the machine.
19. The drill bit and shavings are hot immediately after drilling, let them cool down.
20. Always clean the drill press table and work area upon completion of the drilling task. Do not use your hands or blow the drill shavings on to the floor, use a bench brush and pan to place them in the trash.

Safety First

Core tool

Safety Tip Sheet: Drill Press

Key Safety Issues

Control workpiece and keep fingers from drill bit:

- * *Keep fingers 3 inches from bit*
- * *Ensure workpiece is secure against against table and fence*
- * *Control small workpieces by clamping to fence or using separate vise*
- * *Return key to holder before starting drill press*
- * *Use safe speed for bit size - bigger=slower, smaller=faster - Don't force it!*

Set-up tips

- * *Ensure table is square to drill bit and bit is tight in chuck*
- * *Use sacrificial board under workpiece for clean exit hole*
- * *Slow up when near back side of workpiece*
- * *Hold cylindrical stock in V-block for drilling*
- * *Use fence for drilling in a perfect row*
- * *Use Depth stop for stopped holes*

Clean-up & Default settings

- * *Vacuum Drill press table and area as needed*
- * *Return bits to cabinet*

SA notes

- * *Contact SA if not sure of proper bit to use (forstner vs. brad point)*
- * *Contact SA if drill bit is dull*

Safety First

Thickness Planers

Safety and Operation Rules

The thickness planer is similar to a jointer in that it removes material from the surface of a board. It is used to make the

surface parallel to the bottom surface. The cutter head is mounted above the feed table. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild planer. Failure to follow the safety rules will result in a loss of shop privileges.



to a
top

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the thickness planer with attention to the task at hand!
2. A three foot perimeter around the thickness planer should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Stand to the side of the machine to avoid kickback or shattering of the wood.
6. Give the work your undivided attention.

Thickness Planer Safety and Operational Rules

1. Make sure the power is off to the machine before making any adjustments other than the depth of the cut and rate of feed.
2. Before inserting the board into the machine, use a caliper to measure along the board to determine the maximum thickness. Set the Thickness planer for that thickness as the starting point, and plane to the desired thickness.
3. The depth of cut should be set before each pass of feeding the stock through the machine.
4. The planer has two speeds but the slower rate of feed produces the best result, the slower the speed the smoother the cut.
5. Keep all guards and covers on the machine when running the machine.
6. Follow the 3" rule for your hands and fingers at the opening of the infeed and outfeed tables.
7. Always turn on the dust collector and open the dust blast gate before turning on the jointer.

Safety First

8. Always check the wood before planing for foreign material in the wood. Plane only clear boards or boards with solid knots to avoid kickback. Do not plane end grain.
9. Place boards on the bed of the machine so your fingers do not get pinched.
10. The shortest board used in the planer is 16 inches.
11. A typical pass should remove no more than 1/8 inch of material that is soft wood, no more than 1/16 inch for hardwood.
12. When planing thin stock 3/8 inch or thinner, you must use a backer board or sled.
13. Each completed revolution of the hand wheel (if equipped) moves the table 1/8 inch. Do not remove more than 1/16 inch per pass. Be aware that bowed boards will cause inconsistent contact with the blades of the planer. Joint the concave surface first before running the board through the planer.
14. If the board is thicker on one end than the other and jams in the machine, do not shut off the machine. Slowly crank open the height adjustment wheel until the board resumes feeding through the planer.
15. The planer is self-feeding.

Safety First

Core tool

Safety Tip Sheet: Planer

Key Safety Issues

Keep Hands and Body well away infeed/outfeed table:

- * Do Not plane stock less than 16" in length, can get stuck between rollers!
- * When feeding stock keep fingers from edge of infeed to prevent pinching
- * Stay clear of pathway in front and back as chips/chunks can fly out
- * Do Not plane stock thinner than 3/8 inches - can shatter in machine!

Set-up tips

- * Double check thickness of stock using caliper/tape
- * Set cutting depth to 1/16" (-0.05) or less
- * Check grain direction - plane uphill to avoid tearout
- * Jointed (flat) face goes down on table
- * Flip boards on thick stock to plane evenly and reduce warping
- * Plane sets of parts together to keep uniform thickness

Clean-up & Default settings

- * Check for sawdust build-up in cabinet - vacuum area & planer as needed
- * Wax bed as needed
- * Leave dust gate open at all times

SA notes

- * Contact SA if if cutters are damaged or not cutting well
- * Ask SA for help when planing large long stock - use rolling cart as needed

Safety First



SANDERS GROUP: Belt / Disc Sander, Sander, Spindle Sander, and Oscillating Sander

CORE Edge Belt

Safety and Operation Rules

These sanders are for surface or edge sanding of wooden materials only. These machines may be used for many types of rough, end grain sanding and simple shaping. The combination belt/disc sander is configured with a sanding disc and belt and some may be individual units. The spindle sander has a cylinder that oscillates vertically. The edge sander has a belt that runs from left to right and oscillates up and down above a table. The safety concepts presented are the same for any size machine. Failure to follow the safety rules will result in a loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the sanders with attention to the task at hand!
2. A three foot perimeter around the sanders should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Sanders and Disc Safety and Operational Rules:

1. All power driven sanders and sanding discs can cause serious abrasive skin burns or cut very quickly causing serious injury with incorrect use or from accidental contact with the abrasive belt or cylinder.
2. Ensure that the gap between the sander's table and the moving disc or belt is kept as small as possible.
3. Always make belt adjustments when the sander is off.

Safety First

4. Make sure the machine is off and the power cord is unplugged before installing or removing belts or discs or when making repairs.
5. Check the integrity of the sanding belt tracking of the machine, as well as the integrity of the disc or cylinder before turning on the machine. Any ripped belts, cylinders or discs should be reported to the Shop Attendant.
6. A dust collector should be connected to the unit, but respiratory protection is very strongly recommended. Make sure the dust collector is turned on before using the sander.
7. Allow the machine to reach full speed before feeding material. Similarly, it takes time for the disc or belt to stop moving. There is no way to stop the machine on short notice.
8. Maintain the 3 inch distance between your fingertips and the moving disc or belt.
9. Do not sand pieces of material that are too small to be safely supported.
10. Always hold the work firmly when sanding.
11. Use the backstop, fence, table or other supports when sanding.
12. ALWAYS hold the work firmly on the downward rotation side of the table when sanding with the disc.
13. Avoid awkward hand positions where a sudden slip could cause a hand to move into the sanding belt or disc.
14. Always remove scrap pieces and other objects from the table, backstop or belt before turning the machine on.
15. Do not push hard on the sanding media. The sander performs best and safest when it is allowed to remove material at the rate for which it was designed.
16. Sanding on wood or plastic will cause heat buildup due to friction and may cause the wood to burn or plastic to soften rapidly.
17. NEVER leave the machine work area when the machine is running or before the machine has come to a complete stop.
18. Shut off power, clean the sander and work area before leaving the area. Use rubber cleaning sticks often on all sanders.
19. When using the oscillating edge sander, always touch the right end of the workpiece first. Warning, never touch the left end first, it will tear a hole in the sanding belt and throw the work piece suddenly to the right

Grizzly Edge Sander: The Edge sander is especially suited in creating long straight edges on a board and precise round overs on corners. Like all sanders, care must be used to prevent damaging the sandpaper prematurely

Safety Issues

1. Approach your work in the Guild Shop and on the wide belt sander with attention to the task at hand!
2. Make sure the entire work area around the wide belt sander is clear of obstructions. A perimeter around the area where you are using the sander should be kept clear of people and debris that impair traction or footing to avoid slips and falls.

Safety First

3. Jamming the workpiece against the sanding belt will cause the piece to shoot uncontrollably to the right
4. If the forward (left) edge of a work piece contacts the belt first, it can get wedged into the miter gage which will tear the belt and injure your hand.
5. All power-driven sanders can cause serious abrasive skin burns or cuts from accidental contact.
6. Make sure the machine is off and the power cord is unplugged before installing or removing belts or when making repairs.

Operating the Sander

1. Inspect the belt and replace if torn. If you are uncertain how to do this, ask the Shop Attendant.
2. Check that the table and stop (miter gauge) are square to the belt
3. Turn the sander on and make sure the belt is tracking at the center of the rollers. To adjust the tracking use the tracking knob located on top and to the left. Loosen the lock nut and adjust the tracking knob until the belt is in the center. If you are uncertain how to do this ask the Shop Attendant.
4. Introduce the trailing (right) side of the work piece to the belt first.
5. Use GENTLE pressure when holding a work piece against the belt
6. To sand end grain, hold the board against the miter gauge
7. Raise and lower the table to distribute wear on the belt
8. Clean the belt often with the rubber belt cleaner stick to prevent it from clogging.
9. If you have angled the table or miter gauge – return them to right angles

Safety First

Edge	Belt	Disc	Spindle
<h2>Safety Tip Sheet: Core Sanders</h2>			
<h3>Key Safety Issues</h3>			
<p>Control workpieces, avoid Nip points & use dust collection/PPE:</p> <ul style="list-style-type: none">* Keep hands/fingers from abrasive surfaces and pinch points* Control workpieces on properly adjusted work rests* Hold small pieces with jig or holding device to prevent injuries* Sand on the downward side on Disc & ease backend of workpiece first on Edge* Use dust collection and proper PPE (mask and eye protection)			
<h3>Set-up tips</h3>			
<ul style="list-style-type: none">* Inspect abrasive belts - replace worn or frayed belts* Use Disc/belt/edge sander for sanding straight flat faces and edges* Use Spindle/end of belt sander for curved shapes* Do Not overtighten Spindle hex nuts when replacing sleeves			
<h3>Clean-up & Default settings</h3>			
<ul style="list-style-type: none">* Vacuum sander and area as needed* Clean belts with crepe rubber stick as needed			
<h3>SA notes</h3>			
<ul style="list-style-type: none">* Contact SA if changing abrasive belts is needed			

Safety First



SawTable Saws

Safety and Operation Rules

Table saws are designed to rip, cross cut, bevel, and cut angles with precision. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Table Saw. The Guild's table saw is a SawStop Industrial cabinet saw that may have features that are different from your personal table saw. This does not include the sliding table saw, which has a separate section. Failure to follow the safety rules will result in a loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the table saw with attention to the task at hand!
2. A three foot perimeter around the table saws should be kept clear of people and debris that impair traction or footing to avoid slips and falls
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Table Saw Safety and Operational Rules:

1. Make sure the power to the saw is disconnected before changing the blade or performing any other maintenance operation.
2. Make sure the machine is off and the blade is stopped before making any adjustments.
3. Make sure that the blade is turning free before you turn on the power: this is especially helpful after you make changes or adjustments.
4. Always loosen and tighten the wheel nuts before and after adjusting the blade. Be sure that the locking nut on the blade-tilting hand wheel is secure for angle cuts so the blade does not move.

Safety First

5. Check alignment of the riving knife, fence, and miter gauge.
6. Follow the 3" rule from the blade; always keep fingers 3" from the blade.
7. Never operate a table saw with the throat insert removed. Use zero clearance inserts when appropriate.
8. The riving knife must be used for all crosscut, tapers and rip operations.
9. When cutting across the grain of the stock use a miter gauge or a crosscut sled.
10. When cutting with the crosscut sled, make sure the outfeed table guide slots are in alignment with the sled.
11. Use a crosscut sled or stop block clamped to the fence as a guide when you crosscut multiple pieces to short lengths.
12. When ripping long stock, make sure that you have help, use the outfeed table, or use a stand to support the work.
13. Use a push stick to rip stock that is 3" or less in width.
14. Stand comfortably, with your feet far enough apart for good balance.
15. Be aware of your position at the saw. Position your body to the left of the blade, so that it is NOT in line with the blade or kickback alley.
16. Make sure that the blade has stopped turning before you remove scrap pieces from the table or adjust for another operation.
17. Never free hand on the table saw.
18. Do not reach over or behind the blade unless the blade has stopped turning.
19. Never use the miter gauge and fence together while cross cutting without a stop block.
20. Keep the blade only 1/8" to 1/4" above the stock.
21. A "drop cut" where stock is lowered into a spinning blade, is not allowed. Nor is any procedure that requires removing the riving knife except using a dado set.

SawStop Specific Notes:

1. There is a safety override switch on the SawStop. This should only be used in rare circumstances, most typically if cutting wet wood that would trigger the saw. When it is necessary to make a cut with the safety override on, flip the main power switch to "ON." Wait until the Green light is steady and the "Red" light is off, turn the bypass key "Clockwise" for 2 seconds, while keeping the key turned on, after 2 seconds pull the Start/Stop Paddle and hold for 2 more seconds. Release the key; the "Green" light will blink slowly and the "Red" light will be off in the Bypass Mode.
2. Flipping the Start/Stop Paddle to off reset the saw to normal operation.
3. The Start/Stop switch is adjacent to the main power switch. It must be on for the saw to operate. The Start/Stop switch must always be turned off and the saw unplugged when changing the saw blade or riving knives.
4. If the safety brake triggers, the brake mechanism and saw blade must be replaced.

Safety First

Core tool

Safety Tip Sheet: Tablesaw

Key Safety Issues

Avoid Kickback and Hand-to-Blade contact:

- * *Maintain straight flat reference surfaces against table and fence*
- * *Have Splitter or Riving knife in place*
- * *Do Not cut warped or cupped boards*
- * *Control trapped workpiece between blade & fence with Push stick*
- * *Do Not using rip fence for cross cutting*

Set-up tips

- * *Use correct blade for the job*
- * *Check that miter, fence and blade are parallel*
- * *Position teeth just above the workpiece*
- * *Check that blade is 90 degrees to table*
- * *Use sled for small or long crosscut workpieces*

Clean-up & Default settings

- * *Drop blade below table*
- * *Turn off machine at paddle switch*
- * *Check for sawdust build-up in cabinet - vacuum area & saw as needed*

SA notes

- * *Contact SA if changing blades or using dado stack*
- * *Contact SA if deactivating Brake for any reason*

Safety First

Tool Safety and Operation Rules

ADVANCED TOOLS

Wide Belt Sander

Safety and Operation Rules

The wide belt sander is similar to a thickness planer in that it removes material from, and smooths the surface of a board or panel. However, instead of using a series of rotating knives and shaving the material, it uses a special wide sanding belt to abrade material from the work piece. Our Bütfering machine is optimized for finishing-- it is not designed to remove a lot of material, or to remove it quickly. For optimal efficiency, let the planer do most of your surface removal before using the wide belt sander.



The sanding belt spins on three rollers above the work piece, which feeds through on a conveyor belt. To avoid accidents, the following operational safety rules must be observed by everyone working on the Wide Belt Thickness Sander. Failure to follow the safety rules will result in loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the wide belt sander with attention to the task at hand!
2. Make sure the entire work area around the wide belt sander is clear of obstructions. A perimeter around the area where you are using the sander should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Wide Belt Sander Safety and Operational Rules:

NOTE: Currently only SA's are allowed to operate the Wide Belt sander these safety rules are provided to give you guidance for project planning.

Safety First

1. Optimally, the use of this machine is a two-person operation. One person will operate the controls and feed stock into the machine. The other person will serve as a “catcher” returning single pieces to the feeder for the next pass, or stacking multiple pieces on a work cart.
2. The minimum work piece length is 16 inches. Ganging together short pieces to satisfy the minimum length requirement is not allowed.
3. Always operate the sander with the dust collection port opened.
4. NEVER put your hand into the machine’s in-feed or out-feed ports while the machine is running.
5. Opening the side hatch during operation will shut down the machine and gouge your work. Keep the door closed at all times.
6. It is vital to follow all of the steps, in the proper sequence, in starting up and in shutting down the wide belt sander. These steps are posted on a clipboard next to the machine on the wall. Failure to follow these instructions will result in the loss of wide-belt privileges.
7. Before starting the machine, set your initial thickness. Always use the thickness gauge next to the machine to measure your work piece. Note that it reads metric. Make an initial pass at a setting equal to your panel thickness, and then reduce thickness for later passes in increments of no more than .3 mm. Make two passes at each thickness setting.
8. The ammeter should read no more than 5 amperes during a sanding pass.
9. Sanding single narrow boards is not recommended. This tends to imprint on the feed roller, and also to round the sanded surface of your work. Minimum width is 2 inches. If you have multiple narrow strips, they can be ganged to make up the minimum width. Minimum width is 2 inches.
10. Switch to Manual mode for your final passes—one on each side—with the finishing platen engaged. Set the air pressure so that the needle is vertical.
11. When done, repeat steps 1 thru 7 in reverse order to affect correct shutdown. Leave the side hatch ajar.

Safety First

SAC CS4 Sliding Table Saw

Safety and Operation Rules

The sliding table saw is used primarily for cutting panels straight and square. Used properly, it can cut many pieces in an efficient and safe manner. By securing a panel to the sliding carriage and moving it through the blade, a straight line can be safely and accurately cut. This technique may also be used to straighten uneven, solid wood with a rip blade or combination blade. This sliding table saw has many features that are different from your personal table saw. In order to avoid accidents, the following operational safety rules must be strictly observed by anyone working with the Guild's sliding table saw.



The sliding carriage is parallel and in alignment to the saw blade. It holds and supports the work piece as the work piece is moved through the blade. The straight edge created is then placed against the crosscut fence to produce a square cut. Repeating this method can produce a piece with four square corners. Stops on the carriage can be attached to allow repeat cuts to exactly the same length. A separate adjustable fence can be fastened to the carriage to make angled cuts. There is a scoring blade that can minimize tear out on the bottom edge of the cut when properly aligned. Besides coming into contact with a sharp, spinning blade, one potentially lethal hazard of the sliding table saw is binding of the work piece resulting in kick back. This can happen during any of the operations and many of the safety rules and procedures are designed specifically to help prevent this from happening. Failure to follow the safety rules will result in a loss of shop privileges.

Definitions:

1. Sliding carriage: A platform on which the material being cut is attached. It is used to move that material through the saw blade.
2. Scoring blade: A small saw blade that makes a shallow cut in the underside of a plywood panel prior to that panel reaching the main cutting blade.
3. Riving knife: A thin blade, located behind the saw blade that rises and falls with the movement of the saw blade. The riving knife keeps the material being cut from closing up on the rear of the blade, thus avoiding kick back.
4. Kick back: The material being cut has a tendency to close up as it exits the blade and may be thrown back at the operator by the teeth of the saw blade rising up into the material.
5. Rip blade: The cutting blade has large, squared off teeth and deep gullets designed to cut along the grain of the wood.
6. Combination blade: Has more teeth than a rip blade has and an alternating top bevel to shear across the grain of a board. It is less aggressive in its cutting action than the rip blade but will make a smoother cut across the grain.

Start with a Risk Assessment to ensure a safe work area:

Safety First

1. Approach all work in the Guild Shop and on the sliding table saw with you're your focused attention to the task at hand.
2. Make sure the entire work area around the sliding table saw is clear of obstructions, especially the path through which the carriage will travel.
3. A perimeter around the area where you are using the saw should be kept clear of anything (including people) that might impair traction or footing and cause slips or falls.
4. Remember, the area behind the saw blade is dangerous due to the constant possibility of kickbacks.
5. Eye and hearing protection are required and dust protection is strongly recommended.
6. Remove loose fitting clothing, gloves, and jewelry. If you have long hair, make sure it is tied back so it can't fall into moving parts.

Plywood Handling

1. Plywood sheets are heavy and cumbersome. The best way to mount them on the saw is to walk them across the floor by pivoting the bottom corner from side to side. Once in proximity to the saw carriage, lean the panel over on to the carriage and then lift the opposite end up to align the panel with the fence. When squaring a sheet of plywood, begin with a crosscut and rotate the sheet counter clockwise, ending with a rip cut.
2. Remember to protect your back and use your legs when lifting heavy materials.

Sliding Table Saw Safety and Operational Rules:

1. Keep yourself and other out of the risk zone when cutting.
2. Be aware of where your hands are as you cut and as you slide the carriage. You're your eyes on the board against the fence
3. NEVER put your hand in the guard area while the blades are spinning.
4. Make sure the work piece is behind the blade guard when starting the saw.
5. Make sure the scoring blade has been retracted below the surface of the table. If the scoring blade is to be used, test cuts should be performed to assure proper alignment with the cutting blade.
6. Make sure the work piece is flat against the work surface at the blade and maintain contact with the fence as you cut.
7. NEVER rip boards less than 10 inches in width on the sliding table saw. If you need to rip a board of that dimension, the Saw Stop will be the best and safest choice. If using the rip fence as a stop, make sure the surface of the fence is retracted behind the cutting blade to avoid catching material between the blade and the fence.
8. A cupped board may be ripped as long as the cup is facing down and it is secured at both ends to the carriage. This allows for two surfaces to be supporting the board through the cut. DO NOT secure so tightly as to flatten the entire surface of the board.
9. Bowed lumber may be ripped with the curve facing down and the leading edge secured to the sled while the trailing end is held in place with an auxiliary hold down. If the

Safety First

bow is severe, it should be flattened first on the jointer before being placed on the sliding table saw.

10. DO NOT REMOVE THE RIVING KNIFE.
11. Dadoing or tenoning operations are not to be performed on this saw.
12. Do NOT place objects other than the work piece on the carriage.
13. Do NOT leave the machine unattended while it is running.
14. Assess the cut to be performed. Make proper adjustments to the crosscut fence, support, stops, hold downs, and return handle. If making angled cuts, a special angle fence will be made available. Long miters are best performed on the Saw Stop.
15. Adjust the guard to the proper height as well. Make sure it will clear any hold downs or fences being used to make the cut.
16. MAKE SURE THAT THE SAW BLADE IS NOT TILTED INTO THE SAW GUARD. THE SAW GUARD/DUST HOOD CAN BE LIFTED OUT OF THE WAY IF NEEDED OR THE WHOLE ARM MAY BE LOOSENED AND THE UNIT SWUNG OUT OF THE WAY. ALL ADJUSTMENTS MUST BE MADE WITH THE SAW TURNED OFF.
17. Turn on the main power. The switch is located on the opposite side of the cabinet from the operator's side.
18. Make sure the scoring blade is set below the table. If the scoring blade is to be used, test cuts will confirm the proper alignment and depth of cut. This must be checked each time the scoring blade is to be used and it is only to be set by a shop attendant trained on the saw.
19. If cutting plywood and a clean cut with no tear out is desired, a sacrificial piece of plywood can be placed beneath the primary piece and will act as a zero clearance plate avoiding the need for the scoring blade.
20. Adjust the height of the main blade and confirm that it is set at 90 degrees.
21. Lock the sliding carriage (especially when loading large material) by engaging the lock. The lock is located on the end of the carriage and is activated by rotating the lever. Load the work piece onto the saw. Secure the work piece by using the hold down. Once the material is secured and properly supported, disengage the lock.
22. Turn on the dust collector. The blast gate should always be open during saw operation. Once finished, close the gate.
23. Check that the work piece and any falloff are safely away from both blades. The guard can be a good reminder.
24. Turn on the machine with the cabinet switch.
25. Check that the work piece is properly referenced to the fence and carriage surface.
26. Press the work piece down on the carriage and against the fence while walking the piece through the blade. Your front hand should be at the area of the board which will pass through the blade first. Your back hand should push the work toward the fence and have your thumb hooked over the edge of the board and the carriage. Pay attention to the feed rate as you do this.
27. Move your work piece out of the way of the blade before moving the carriage back. Do NOT back pieces through the blade.
28. Remove any offcuts that may be in the way before making another cut. Never place hands in the blade area while the blades are spinning. Use a stick or stop the

Safety First

machine. To stop the machine, turn it off with the cabinet switch. Do not use the emergency red button unless it is an actual emergency.

29. Turn off the main power.

Above all, if you are not 100% certain of any operation with this saw, ask for help. The attendants are there to make sure you are safe. Failure to strictly follow these guidelines will result in a loss of shop privileges and could subject the Guild to serious liability.

Safety First

Routers

Safety and Operation Rules

The widespread use of routers is based on their ability to perform an extensive range of smooth finishing and decorative cuts. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Routers. Failure to follow the safety rules will result in a loss of shop privileges.

Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and with the router with attention to the task at hand!
2. A two foot perimeter around the area where you are using the router should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.



Router Safety and Operational Rules:

1. Make sure router is turned off before plugging it in.
2. Make sure the work surface is free from nails, knots, and other foreign objects.
3. Place the work piece securely in a vise or other recommended clamping device. Holding the work piece by hand is unstable and may lead to loss of control.
4. Sharp bits must be handled with care. Never use dull or damaged bits that can snap during use. Dull bits tend to overload, causing possibility of bit breakage.
5. Never use bits that have a cutting diameter greater than the opening in the router base.
6. Make sure the router is unplugged from the power source before changing a bit.
7. Make certain that the bit shaft is engaged in the collet at least 1".
8. Never bottom out the router bit, as this will damage the collet.
9. Always use the wrenches provided with the tool to make adjustments. Using the correct wrench enables a more secure grip on the tool and may prevent slipping.
10. If using a bit left in the machine, after changing the bit, or making any adjustments, make sure the collet nut and any other adjustment devices are securely tightened. Loose adjustment devices can unexpectedly shift causing loss of control; loose rotating components may be violently thrown.
11. After turning on the router, wait until it has reached full speed before starting the cut.

Safety First

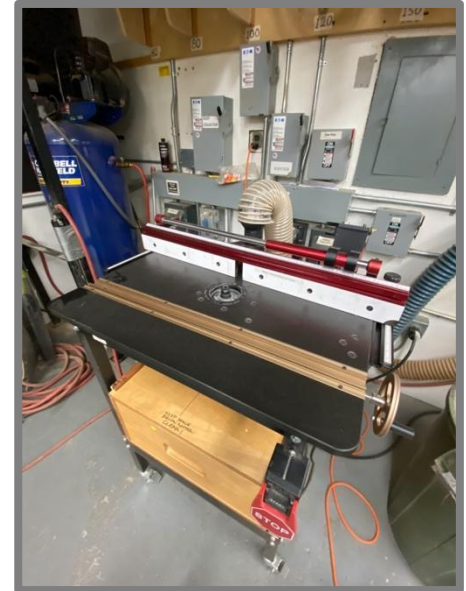
12. Keep your fingers at least 3 inches from the spinning bit.
13. Never start the tool when the bit is touching the work piece. The bit may grab the work piece and cause loss of control. Follow the tool manufacturer's procedure for setting the depth of cut.
Tighten adjustment locks.
14. For maximum control, hold the router firmly with both hands. The reaction torque of the motor can cause the tool to twist.
15. Always feed against the direction of rotation.
16. Feeding the tool in the wrong direction causes the cutting edge of the bit to climb out of the work piece and pull the tool toward the operator.
17. Never touch the bit during or immediately after use. The bit is too hot to be touched with bare hands.
18. Never lay the tool down until the motor and bit have come to a complete standstill. The spinning bit can grab a surface and pull the tool out of your control.
19. Return the bit to the tool cabinet after use. Never throw bits into the bottom of a drawer. The bits should be stored in a router bit holder to keep them sharp.
20. Never make freehand cuts. Holding the work piece by hand is unstable and may lead to loss of control.
21. Support long work pieces at the same height as the saw table.
22. Use clamps to secure the work piece to the table and avoid injuries.
23. Never cut small pieces that would require you to put fingers within 3" of the cutting blade without a clamping device.

Safety First

Router Table

Safety and Operation Rules

Routers mounted in a table are used to create decorative surfaces on a work piece. The router is a more versatile machine if used in a router table. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Router Table. Failure to follow the safety rules will result in a loss of shop privileges.



Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the router tables with attention to the task at hand!
2. A three foot perimeter around the router table should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Router Table Safety and Operational Rules

1. Make sure all guards are in place and working properly before using a router in a table.
2. Make sure the router is unplugged before changing a bit in the router.
3. Always use the wrenches provided with the tool to make adjustments.
4. After changing the bit or making any adjustments, make sure the collet nut is securely tightened and the unused portion of the bit is covered by the guard before tool use.
5. Always keep bits sharp and clean of rust and pitch to avoid excessive friction.
6. Maintain proper adjustments for infeed and outfeed fences. Adjust the fence halves so the cutter opening is no more than is required to clear the bit. Lock the fence into position.
7. Take time to examine your work piece and make sure that all necessary precautions have been taken before cutting. Always make sure the work surface is free from nails, knots, and other foreign objects.
8. Clamp a block of wood to the fence over the top of the bit as a bit guard if none is present.
9. When making a freehand cut, use a starting pin and a bearing on the bit.
10. Always keep your fingers and hands away from the path of the bit. Follow the 3" rule; keep your hands and fingers 3" from the router bit.

Safety First

11. Use push sticks, feather boards, or any other safety device when cutting small or short stock to control the stock and to keep your hands protected from the spinning bit.
12. Shaping thins as well as narrow materials can be hazardous; always use feather boards or push blocks.
13. Do not shape chipboard, panel board, or any stock that has paint or varnish on it. Properly support long lengths of material. Use work supports or stands as needed.
14. Never feed the work piece in the direction of cutting blade rotation. Otherwise, the cutter blade can grab and pull the work piece.
15. Don't ever trap the stock between the fence & the bit.
16. Always use a miter gauge & clamp for end shaping to maintain safe control.
17. Always connect the dust collector to the exhaust port before use.
18. Keep the exhaust port pointed away from you. Don't reach into the exhaust chute to unclog chips. Stop the tool and unplug it from the power source. After making sure the bit has stopped, clear the chute with something other than your bare hand.
19. NEVER reach under the table while the tool is running.
20. Never store the router table with a bit installed. Return the bit to the tool cabinet after use and lower the collet below the top of the table.

Safety First

Multi-Router

Safety and Operation Rules

Setup Tips

Mark a layout diagram of your mortise or tenon on one workpiece and use that as a setup guide for the multi-router. Be sure the router is unplugged for the entire setup process. Five setups are then required.

- a. First, is the table. For most items it will remain flat (parallel to the router bit). If you are making angled mortises or tenons, the table should be set to the proper angle first.
- b. Next, use the stops on the table surface to locate your workpiece where it will be clamped during the cutting operation. Attach the air hose and use the valve to clamp the piece into position, making sure it rests squarely against the setup flange at the end of the table nearest the router. Please note the safety tip below regarding these vacuum clamps. They can be dangerous.
- c. Then set the Z (up and down) axis. For a mortise that will be a fixed position that places the bit precisely on your layout diagram. Do this with the router bit set by hand so its widest dimension is in a vertical position. For a tenon, set the stops so the bit can travel precisely along the layout lines for the tenon. Make sure that the bit will not make contact with the table at any point.
- d. Then, use the stops to set the X axis (the distance the bit will travel into and out of the workpiece). That will determine the depth of the mortise or length of the tenon. Once again, make sure that the router bit will not contact the multi-router table.
- e. Finally, set the Y axis (the horizontal travel of the table) by first hand-turning the router bit so its full width is in a horizontal position. Then, use the stops set the table travel so it exactly matches the distance between your layout lines.



Plug in the router and you are ready to go.

Key Safety Issues

Installation of the router bit and all setup should be done with the router unplugged.

Safety First

Be careful when engaging the vacuum clamps that hold your workpiece. Keep fingers clear because they can cause serious injury.

Always keep your hands away from the spinning router bit.

When using the handles to make any cut, move them in a slow, deliberate but steady manner. Rapid or forced cutting is dangerous, so let the bit do the cutting.

Be sure you have clear working space around the machine. This is not a machine to use in a crowded or congested area.

Clean-up and Default Settings

When finished, unplug the machine, remove the bit, close the air/vacuum valve and unhook the air hose. Put the bit back where you found it.

As with any router, a multi-router can make a mess. Be sure to clean up with area.

Safety First

Core
tool

Safety Tip Sheet: Multi-Router

Key Safety Issues

Keep fingers from router bit when moving

- * All setup should be done with the router unplugged.
- * Be careful when engaging the vacuum clamps that hold your workpiece.
- * Make any cut in a slow, deliberate but steady manner.
- * Be sure you have clear working space around the machine.
- * This is not a machine to use in a crowded or congested area.

Set-up tips

- * If you are making angled mortises or tenons, set the table angle first.
- * Set workpiece stops; attach air hose and clamp with valve in proper position.
- * Set the Z axis (up and down), making sure bit won't touch table.
- * Use the stops to set the X axis (distance into and out of workpiece).
- * Set the Y axis (horizontal travel of table) by first hand-turning the router bit. Then use stops to set table travel to match distance between layout lines.

Clean-up & Default settings

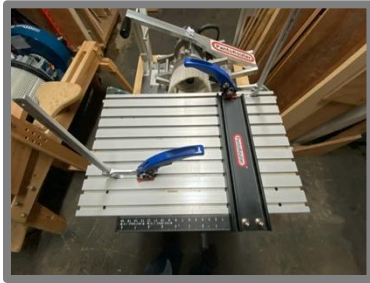
- * When finished, unplug the machine, remove the bit, close the air/vacuum valve and unhook the air hose.
- * Put the bit back where you found it.
- * Be sure to clean up with area.

SA notes

- * Contact SA if not sure of proper use.
- * Contact SA if router bit is dull

Safety First

OTHER ADVANCED TOOLS



PANTO-ROUTER

Safety First

Tool Safety and Operation Rules

UNCLASSIFIED TOOLS

Bench Grinder

Safety and Operation Rules

A bench grinder is a machine used to drive an abrasive wheel or wheels. Depending on the grade of the grinding wheel, it may be used for sharpening cutting tools. To avoid accidents, the following operational safety rules must be observed by everyone working on the Guild Bench Grinder. Failure to follow the safety rules will result in a loss of shop privileges.



Start with a Risk Assessment to ensure a safe work area:

1. Approach your work in the Guild Shop and on the grinder with attention to the task at hand!
2. A two foot perimeter around the grinder should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
3. Eye and hearing protection is required, dust protection is strongly recommended.
4. Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
5. Give the work your undivided attention.

Bench Grinder Safety and Operational Rules:

1. Make sure the grinder is stopped and unplugged before making any adjustments.
2. Make sure the tool and its accessories are in the proper working order before working with a bench grinder.
3. For the individual changing a grinding wheel, "Ring Test" any wheels before mounting them. Suspend the wheel on a pencil held horizontally through the center of the hole. Tap the wheel lightly with a plastic screwdriver handle, in spots 45 degrees from vertical. If it produces a clear ringing tone it is in good condition. If it sounds dull, contact the Shop Attendant to REPLACE it.
4. Inspect the wheels for a hairline crack before using. DO NOT USE A CRACKED WHEEL.
5. Make sure the wheel housing guards are in place.
6. New grinding wheels should be balanced by dressing and truing to eliminate vibration.
7. Used wheels should be trued and dressed when worn out of round, or the surface face is clogged

Safety First

or worn smooth. This provides a clean sharp grinding surface and re-balancing of the wheel. Dress the wheel on the face only. Dressing the side of the wheel would cause it to become too thin for safe use.

8. Don't operate a grinder unless it is securely seated on the workbench or floor so that the grinder does not move when used.
9. Adjust tool rests 1/8" from wheel and slightly below center. Re-adjust as the wheels wear down.
10. Stand to one side of the wheel when turning on power. Allow the grinding wheel to run at full operating speed for one minute. DO NOT use a wheel that vibrates.
11. DO NOT grind on the side of the wheel.
12. Bring the object into contact with the grinding wheel slowly and smoothly avoiding impact or bumping motions.
13. Move the object being ground, back and forth across the face of the wheel only, as this prevents "ruts" or grooves from forming.
14. Never grind small stock. Do not attempt to grind or sharpen anything that cannot be adequately supported by the tool rest. Use clamping pliers when grinding parts that cannot be held easily by hand.
15. Do not touch the ground portion of the workpiece until cooled.
16. Turn off grinder and wait until it comes to a complete stop. Never stick an object into the wheel to stop the grinder quicker.
17. Others should stay at least 3' away from you when you are using the grinder.

=====

Safety First

Supermax 19-38 Drum Sander

Safety and Operation Rules

Best Uses:

- Sanding thin boards (minimum: 1/16")
- Sanding short boards (minimum: 3")
- Small sanding jobs



Safety Issues:

- Start with a Risk Assessment to ensure a safe work area.
- Approach your work in the Guild Shop and on the wide belt sander with attention to the task at hand!
- A perimeter of three feet around the sander should be kept clear of people and debris that impair traction or footing to avoid slips and falls.
- Eye and hearing protection is required, dust protection is strongly recommended.
- Remove loose fitting clothing, gloves, jewelry, and tie back long hair.
- Give the work your undivided attention.

Operating Instructions:

1. Consult Shop Attendant if have any questions regarding the operation of this machine.
 - a. Consult Shop Attendant if drum is not parallel to conveyor belt or if conveyor belt is not tracking.
 - b. Use proper abrasive grit(s) for your task (see chart).
 - c. Check/adjust abrasive tension.
2. Only sand flat boards
3. Measure stock thickness with calipers and set depth gauge for slightly thicker stock.
4. Place stock under drum and lower the sanding head until stock is in contact with drum but the drum can still be rotated by hand. Remove stock and start conveyor belt (at mid-range) and drum at this setting.
5. Decrease thickness setting gradually (1/4 turn maximum; less for finer grits, harder woods or wide boards). Take two passes at each setting. (Drum motor or conveyor gear motor will stall if machine is overloaded.)
6. Sweep conveyor belt clean after all operations.
7. Inspect drum abrasive and clean if needed; leave dust collection system on when cleaning drum abrasive.

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Recommended Grit Application:

80 Grit – Light dimensioning, removal of planer ripples

100 Grit - Light surfacing, removal of planer ripples

120 Grit - Light surfacing, minimal stock removal

150 Grit - Finish sanding, minimal stock removal

Safety First

Safety Tip Sheet: SuperMax Sander

Key Safety Issues

- *Minimum length is 2 1/4"; maximum thickness 4"; minimum thickness 1/32".
- Always wear eye protection while operating the sander.
- Keep hands and clothing away from operating drum.
- Start slowly; do not increase conveyor speed that activates red warning light .
- * Be sure you have clear working space around the machine.
- *Maximum of about a quarter turn on the depth handle between passes.

Set-up tips

- * Do not assume this sander is a planer. Sand ONLY flat boards.
- *Do not operate sander with dust cover opened.
- *Check that the sanding belt is correctly mounted
- * With the machine turned off, determine a starting point.

Clean-up & Default settings

- * Do not leave the machine until at a complete stop and turned off.
- *Use a rubber eraser to clean the belt after each use
- *Unplug the tool before changing belts, making adjustments or servicing.
- *Be sure to clean up the area.

SA Notes

- * Contact SA if not sure of proper use.
- * Contact SA if belt needs to be replaced.

Safety First

Other Unclassified Tools

Drill motor, corded and battery

Inspect tool for hazards.
Inspect the floor for debris.
Unplug or remove battery before making any changes.
Clamp work to the bench.
PPE, wear eye protection.
If you can't see both hands, don't turn the tool on.
Let the tool do the work. Don't force the action.

Random orbital sander

Inspect tool for hazards.
Inspect the floor for debris.
Unplug or remove battery before making any changes.
PPE, eye and ear protection are required for this tool.
Clamp work to the bench
If you can't see both hands, don't turn the tool on.
Connect to dust collection.
Let the tool do the work.
Don't force the action with downward pressure.
Guide sanding motion parallel to grain.
Use sharp sandpaper.

Circular saw

Inspect tool and blade for hazards.
Inspect the floor for debris.
Unplug or remove battery before making any changes.
Test all guards for easy motion and complete closure.
Secure both shoe adjustment knobs/levers.
Do not use your body as a saw horse.



Clamp workpiece to the bench.
If you can't see both hands, don't turn the tool on.
Let the tool do the work. Don't force the action.
Use both hands to guide the tool.
PPE, including eye and ear protection are required for this tool.
Review the complete safety manual for this tool.

Jigsaw

Inspect tool for hazards.
Inspect the floor for debris.
Unplug or remove battery before making any changes.
Clamp workpiece to the bench.
PPE, eye and ear protection are required for this tool.
If you can't see both hands, don't turn the tool on.
Choose blade appropriate for the material.
Let the tool do the work. Don't force the action.

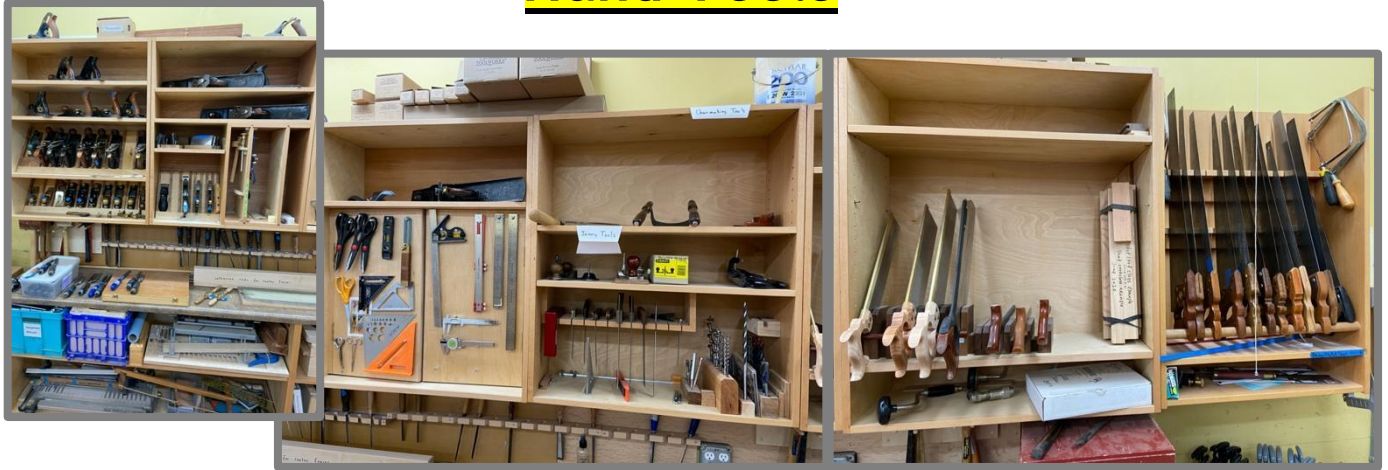
Safety First



Safety First

Tool Safety and Operation Rules

Hand Tools



Safety Rules for Hand Tools

The bench room is the area of the shop populated by benches used for project assembly, hand tool work, limited finishing, layout, and classroom instruction. Hand tools – chisels, saws, mallets, planes, and glues are available for use in the bench room.

Safety Standards

1. Assess risks and hazards before engaging work to determine cutting pathways, need to secure work to bench, proximity to other bench room users, personal protective equipment needed, potential flying wood chips.
2. Recognize that chisels, planes, drills, saws, and marking knives have sharp edges and careless use can result in injury.
3. Hold tools by the handle and never cut, or exert pressure, towards any part of the body.
4. Hold work piece securely so that it cannot move unpredictably; only cutting edge of your tool moves while the work piece remains fixed.
5. Keep the workspace clear and orderly.

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- 6.** Use tools that are the RIGHT SIZE & RIGHT TYPE for your job. Use them ONLY for the job intended.
- 7.** ALWAYS WEAR EYE PROTECTION. (simple safety glasses or prescription glasses.
- 8.** Keep your cutting tools SHARP and in good condition. Never use dull blades.
- 9.** If anything breaks or malfunctions — report it to the Shop Attendant AT ONCE.
- 10.** AFTER USING A TOOL — clean it and return it to its proper storage place.
- 11.** Direct sharp edge away from yourself and other persons when handing tools to one another.
- 12.** Use eye and hearing protection as necessary.
- 13.** Avoid having electrical cords or dust collection hoses in pathways that may cause tripping hazard.
- 14.** Use of toxic solvents, chemicals, or finishes that require good ventilation are prohibited due to potential effect on other bench users.
- 15.** The shop attendant has oversight and safety enforcement for the bench room as well as the machine shop.

Safety First

SAFETY TRAINING

Different levels of safety training are required to access the Guild Shop and equipment.

REQUIRED TRAINING CERTIFICATION-MACHINE SHOP & BENCH ROOM: This training begins with the Introduction to the Guild session for new members who wish to use the Shop. Beginning woodworkers will also be required to take the Getting Started-Machine Tools training session.

REQUIRED TRAINING CERTIFICATION-MACHINE SHOP: For those members wanting access to the machine room, they must then complete the Core Tools Certification in order to receive their Shop access card.

CORE TOOL CERTIFICATION: These training sessions will provide you with safe tool use instruction and with the certification to use specific Core Power Tools in our machine room. The CORE TOOLS in the shop are the chop saw, bandsaws, table saws, drill presses, jointers, planers and some sanders.

REQUIRED ADVANCED TOOL TRAINING CERTIFICATION – MACHINE ROOM: There are also machine tools in the Shop that are considered ADVANCED TOOLS. Each of these tools has certification training that a member must complete to use these tools in the Shop.

ADVANCED TOOLS: These tools include the routers and router tables, wide-belt sander, sliding table saw, CNC, various stationary sanders, panto-router and multi-router. All certifications are tool specific.

ADDITIONAL RECOMMENDED TRAINING – MACHINE ROOM: The Guild Shop has an extensive inventory of tools. In addition to the above is a group of powered tools considered UNCLASSIFIED TOOLS.

UNCLASSIFIED TOOLS: These tools will only recommend that the user watch a prescribed video or receives approval from the Shop Attendant. Examples of Unclassified Tools include the scroll saw, grinders, jig saws, Dremel tools, biscuit joiners, Festools, and air-powered tools.

ADDITIONAL RECOMMENDED TRAINING – BENCH ROOM: Finally, the Shop has a full array of HAND TOOLS. Although not powered, hand tools represent a number of potential safety hazards. Preparing members to safely utilize these tools will also involve training. Basic hand tool safety training is included in the Intro to the Guild training.

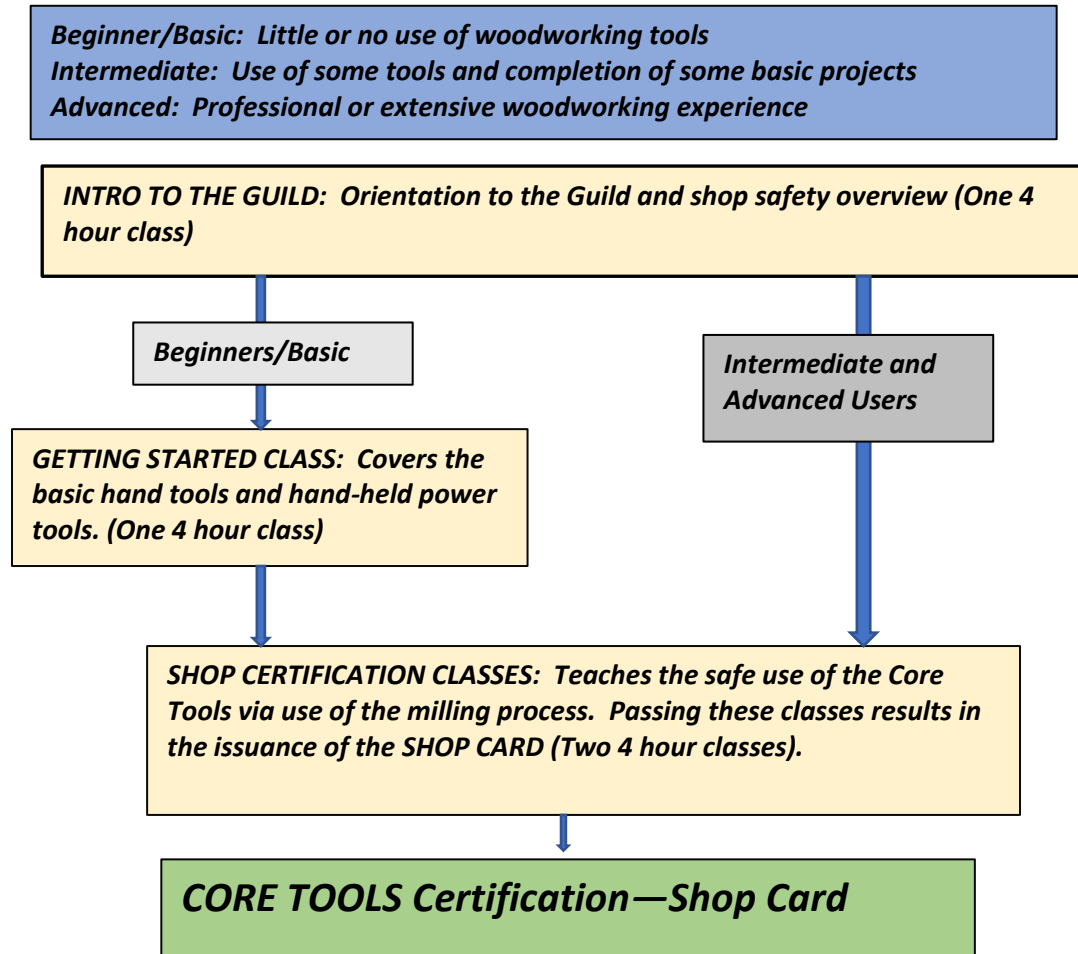
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Training Requirements by User Group

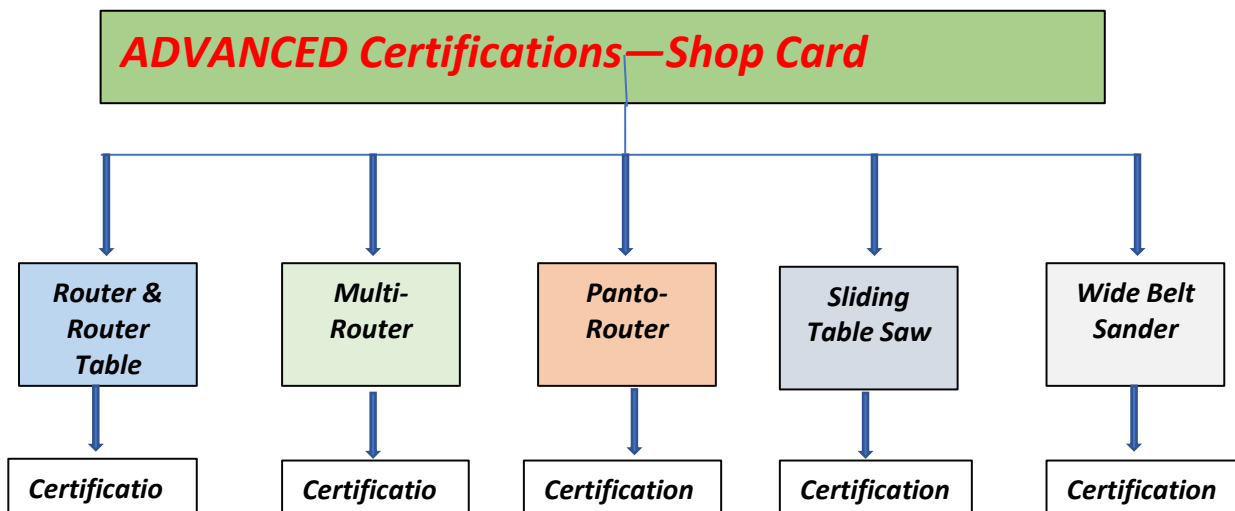
<i>Training Session</i>	<i>Hands On</i>	<i>Video</i>	<i>Required</i>	<i>Recommend</i>	<i>Group</i>
<i>Intro to the Guild</i>	X	X	X		<i>All Shop Users</i>
<i>Getting Started</i>	X	X	X		<i>Beginner Users</i>
<i>Core Tools Certification</i>	X	X	X		<i>All Shop Users</i>
<i>*Advanced Tools Certification</i>	X	X	X		<i>All Users/Tool</i>
<i>Unclassified Tools</i>		X		X	<i>All Shop Users</i>
<i>Hand Tools</i>		X		X	<i>All Shop Users</i>
<i>First Aid</i>	X	X	X		<i>Shop Attendants</i>
<i>*Tool Specific</i>					

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CERTIFICATION PATHWAY FOR USE OF THE GUILD SHOP



PATHWAY FOR ADVANCED TOOL USE IN THE SHOP



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BENCH ROOM

The bench room is the area of the shop populated by benches used for project assembly, hand tool work, limited finishing, layout, and classroom instruction. Hand tools – chisels, saws, mallets, planes, and glues are available for use in the bench room.

The bench room is open for member use during open shop if they have completed the Intro to the Guild Training and, for beginners, the Getting Started training.

There is no usage fee for using the bench room unless power tools are used such as routers, grinders, biscuit joiner, Domino, and power drills. A Shop card is not required unless power tools are used. Members using a shop fee card have priority on bench space. A bench room user can be a drop-in, but members will be advised to check the shop schedule and sign up as a bench room user (new category) as bench space is limited. The assembly bench in the machine room is not available for general use unless approved by the SA. If the shop is being used by community projects, project builds, or classwork the bench room is not available for general use. Bench room closes when the shop closes.



Safety Standards

1. Assess risks and hazards before engaging work to determine cutting pathways, need to secure work to bench, proximity to other bench room users, personal protective equipment needed, potential flying wood chips
2. Recognize that chisels, planes, drills, saws, and marking knives have sharp edges and careless use can result in injury.

3. Hold tools by the handle and never cut, or exert pressure, towards any part of the body.
4. Hold work piece securely so that it cannot move unpredictably; only cutting edge of your tool moves while the work piece remains fixed.
5. Keep the workspace clear and orderly.
6. Drinking and eating is permitted in the bench room.
7. Direct sharp edge away from yourself and other persons when handing tools to one

Safety First

another.

8. Use eye and hearing protection as necessary.
9. Avoid having electrical cords or dust collection hoses in pathways that may cause tripping hazard.
10. Use of toxic solvents, chemicals, or finishes that require good ventilation are prohibited due to potential effect on other bench users.
11. The shop attendant has oversight and safety enforcement for the bench room as well as the machine shop.

Epoxy

With one exception, there is a total ban on the use, including storing, mixing, applying, cutting, machining and sanding any epoxy product, cured or not, in the Guild.

The exception is those applications completed off-site that include, in total, no more than a few ~2" diameter or smaller knotholes, cured for two weeks (by the honor system). These will be allowed to be machined. These specifications of size and frequency, also apply to work done with hand tools in the Bench Room (block plane, chisel, etc.).

Painting and Staining

Q) Can I finish my project at the Shop?

A) The shop does not have a paint booth for spraying nor does it have any way to control dust. So, in general, the shop is not a good place for finishing work. See next question.

Q) Can I stain or oil my project. I like to put a finish on before I assemble my project.

A) Yes, as long as you bring paper to protect the assembly benches and rags to clean up afterwards. It is your responsibility to leave your area clean for the next user. Also, you must properly dispose of oiled rags and paper towels as they are a fire danger. Remember to also bring a mask to protect yourself from sanding and finishing fumes.

Safety First

Medical Response

Definitions:

- Medical emergency-Any life-threatening injury or health event
- Medical evaluation-An injury or event that should be seen by medical personnel, not necessarily EMS. An urgent care clinic might be appropriate.
- Minor incident-An injury or health event in which neither an emergency response nor medical evaluation is necessary.

A. In case of emergency...

Accidents are preventable, and this is the mindset we should maintain in the Guild Shop. Accidents are not inevitable. However, should one occur, your response to the situation is critical.

B. Emergency supplies

There are two First Aid Boxes located in the shop: one by the door to the rest room and the other on the side of the cabinet in the bench room. SAs should familiarize themselves with their contents. Included are the kinds of bandages and dressings needed for minor injuries, which are those a SA should expect to treat. More serious injuries require calling 911 immediately.

Either the SA or someone else in the shop designated by the SA should immediately begin to document the incident – before details get forgotten or confused. See the Incident Reporting Section later in this section.

C. 911 Situations and Procedures

The following is posted near the first aid boxes in the shop. It is here for SAs to review.

***When
calling 911, you will need to
know the shop address and
phone number***

GENERAL GUIDELINES FOR WHEN TO CALL 911:

- Copious blood flow/Amputation/Impaled object
- Unresponsiveness/Disorientation/Fainting/Collapse

Safety First

- Medical emergency—e.g. heart attack, stroke, sudden severe pain or disability, ...
- Fall of more than 2'
- Traumatic impact to body
- Burns covering more than a small area
- Any injury to the eyes, face or genital area
- Severe anaphylactic (allergic) reaction to ingestion of substance or to an insect sting. This could also result from inhalation of dust if the person is allergic. Many wood types can cause allergic reactions.
- Choking emergency
- Electric shock causing burn or loss of consciousness. If there is any doubt, the victim should be medically evaluated. Severe electric shock can cause severe internal injury and may not present external evidence.



One situation that SAs should be aware of: a person with very low blood sugar can become confused and even unconscious. Paramedics arrive and give the patient sugar with an IV. The patient wakes up and refuses to go the hospital, signs a patient refusal and the 911 people leave. But SAs should be aware that the sugar from the IV will not last long and the trouble can return. If not going to the hospital the patient needs to eat a meal. Returning to the shop is NOT an option.

D. Non-911 Situations and Procedures

In most situations the responsibility of the SA is limited to covering minor wounds, determining if 911 should be called, and/or making the patient comfortable until the professionals from 911 show up.

E. Urgent care facilities near shop

Zoom+Care

7855 SW Capital Hwy

(503) 684-8252

(8:00-6:00 weekdays, 9:00-6:00 weekends)

OHSU Gabriel Park

4411 SW Vermont

Safety First

(503) 494-9992

(7:30-8:00pm weekdays, 9:00-1:00 Sat)

Legacy-Go Health

4800 SW 76th Ave

(971) 808-0665

(8:00-8:00 weekdays, 9:00-5:00 weekends)

F. Fire station locations closest to shop

PFB Station 18—8720 SW 30th Avenue (Response time 3-4 minutes)

PFB Station 10—451 SW Taylor's Ferry Rd (Response time 4-5 minutes)

TVR&R Station 70—8299 SW Beaverton Hillsdale Hwy (Response time 8-10 minutes)

BLOOD

In case of traumatic injury, the general rule is to put on gloves and cover any wounds as soon as possible. Both small and large wounds must be covered. If bleeding is extensive call 911.

SAs should be aware that not all blood is innocent or harmless. If any amount of blood is present, put on a pair of gloves. You are not only protecting yourself, you are also protecting the patient from you. Gloves are located in the First Aid Boxes.

G. Frequently Asked Questions

1. Is there a cost involved in calling 911?

No, there is no cost involved. However, there will be a cost if an ambulance is subsequently dispatched and a person is transported, but that will normally be decided only after 911 responders are involved.

2. What to do if the member does not want 911 called?

Safety First

The member has no say in the matter. The assumption is that the patient may be either in shock or suffering from a medical issue or traumatic injury. It is entirely up to the Shop Assistant as to when to call 911. The SA is encouraged to do so if s/he believes that the patient would benefit from the evaluation or opinion of a medical expert. 911 calls are not charged to anyone. The only time a charge is involved is if medical transport is called.

3. What to do if a member becomes belligerent?

If a member becomes belligerent s/he will be asked to leave, and an incident report will be generated. If necessary, the Shop Attendant may request the assistance of other members. The member will be required to appeal to the board before being admitted to the shop again.

4. When to allow a person to continue working and when to require them to leave?

This is entirely up the Shop Attendant. If the Shop Attendant feels that the person will be a danger to him/herself or other members in the shop this should be pointed out to the member and ask the person to leave for his/her own safety and the safety of others.

5. When to call family?

Calls to the family should be initiated whenever the member has requested it or has had a medical emergency and is unable to request it. Feel free to offer to contact family if a member has been injured or seems disoriented.

6. When a member should not be allowed to drive?

You cannot prevent a member from driving. You can however offer a ride or encourage the person to accept rides from others and help him to recover his own car.

Safety First

Guild of Oregon Woodworkers First Aid Kit Policy

First Aid Kits

Policy: The Guild of Oregon Woodworkers will provide First Aid Kits in its shop that hold a minimum of supplies that would allow an individual to treat him or herself for basic first aid or would allow for a Shop Attendant to provide short-term care until emergency responders can take charge.

First Aid Kit Supplies:

The contents of the First Aid Kits will be based upon the guidance and requirements specified by ANSI Z308.1-2015 Class A as shown in the following table.

First Aid Supplies	Minimum Quantity	Minimum Size
Adhesive Bandage	16	1x3in
Adhesive Tape	1	2.5yd (total)
Antibiotic Application	10	1/57oz
Antiseptic	10	1/57oz
Breathing Barrier	1	-
Burn Dressing (gel soaked)	1	4x4in
Burn Treatment	10	1/32oz
ColdPack	1	4x5in
Eye Covering (with means of attachment)	2	2.9sq in
Eye/Skin Wash (1fl oz total)	1	-
First Aid Guide	1	-
Hand Sanitizer	6	1/32oz
Medical Exam Gloves	2 pair	-
Roller Bandage (2in)	1	2in x 4yd
Scissors	1	-
Sterile Pad	2	3x3in
TraumaPad	2	5x9in
Triangular Bandage	1	40x40x56in

Additional contents may be included that can address common injuries for woodshops such as tweezers for wood splinters.

Safety First

First Aid Kit Policy:

1. Minor injuries, such as minor skin cuts, slivers that penetrate skin, or foreign objects in eyes, may be treated by the individual affected using supplies from the First Aid Kit and notify the Shop Attendant,
2. Injuries should be evaluated by the Shop Attendant,
3. For more serious injuries, the Shop Attendant should call 911 and administer emergency care using First Aid Kit supplies until the emergency responders arrive,
4. The first aid kits should be kept adequately stocked and maintained, and
5. Shop users should not be involved in care of an injured person's wounds because of concerns about exposures to blood and body fluids and requirements for training to render first aid care.

First Aid Kits

1. First aid kits will be available and maintained for treatment of minor injuries or for short-term emergency treatment until medical assistance arrives.
2. First aid kits will be wall mounted in a marked location in the Bench Room and the Machine Shop.
3. Quarterly Inspections will be made to inventory contents. Depleted supplies will be replenished on a bi-annual basis. Some supplies may have expiration dates; and that beyond that marked date should be replaced.
4. In addition, eye wash stations will be wall mounted near the First Aid Kits

Safety First

Fire extinguishers

As an SA, in the first shifts of the month, check the inspection tag on each extinguisher. If it has not been inspected for that month, do so, following the posted procedure on the wall beside the extinguisher. If it does not pass, email both lead.sa@guildoforegonwoodworkers.org and safety.chair@guildoforegonwoodworkers.org.

There are four extinguishers-One in the bench room, one on the wall by the restroom, one by the door near the Sliding table saw, and one in the Annex near the electrical panel just inside the door on the right. Each is identified by a red and white arrow labeled Fire Extinguisher, pointing to its location.

The acronym PASS is used to describe the four basic steps of fire extinguisher use.

Pull pin at the top of the extinguisher, breaking the seal

Aim. Approach the fire standing at a safe distance

Squeeze the handles together to discharge the extinguishing agent inside

Sweep from side to side at the base of the fire, until the fire is out



Monthly Fire extinguisher inspection procedure (FROM SA HANDBOOK)

Ensure access to the extinguisher is not blocked, and that the sign indicating its location is readily visible.

Safety First



The pressure should be in the green zone on extinguishers equipped with a gauge. If not in the green zone, the extinguisher requires professional maintenance. Report this to the Safety Committee via email



safety.chair@guildoforegonwoodworkers.org

Verify the locking pin is intact and the tamper seal is not broken.



Safety First

Visually inspect the hose and nozzle to ensure they are in good condition.

Visually inspect the extinguisher for dents, leaks, rust, chemical deposits or other signs of abuse/wear and note any findings on the inspection report. If the extinguisher is damaged or needs recharging report this to the Safety Committee via email safety.chair@guildoforegonwoodworkers.org.



Check the inspection tag for previous and required inspection, maintenance, or charging and initial and date your inspection. Note the inspection in the log.



Safety First