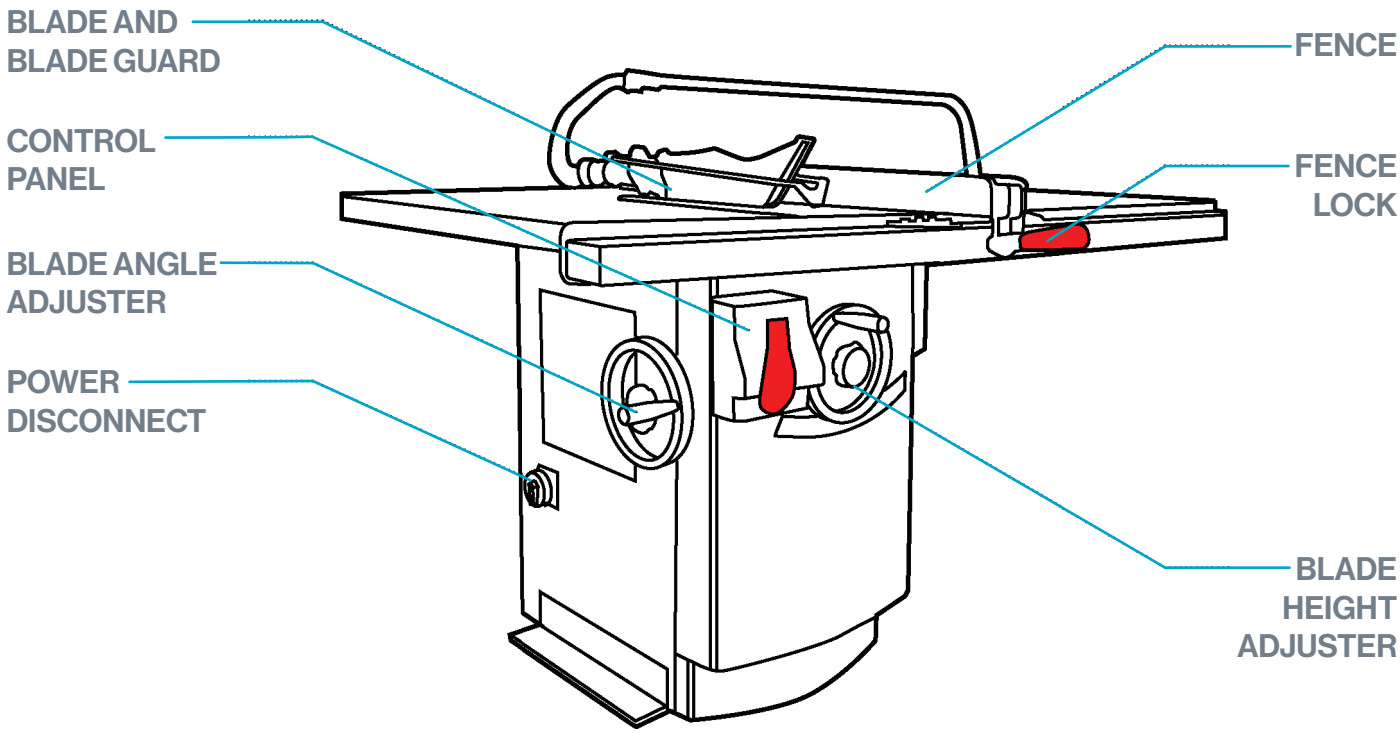
WOOD TABLE SAW

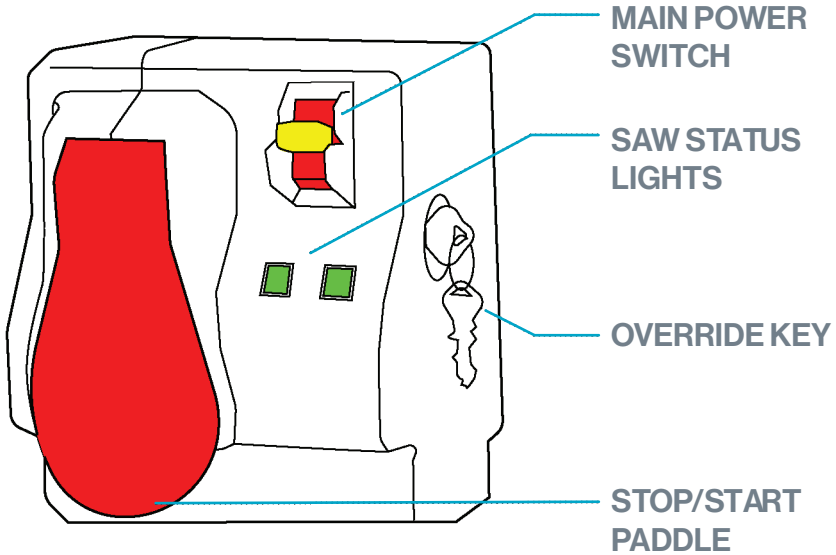
RIT | The Student Hall for Exploration and Development

WOOD TABLE SAW

THE TABLE SAW MAKES QUALITY PERPENDICULAR CUTS



- Miter gauge slots on either sides of the blade
- Fence to blade distance markers
- Throat plate
- Status light key/glossary > saw stop system status codes
- Key stays locked up



CONTROL PANEL DETAILS

MATERIALS

ALLOWED MATERIALS

+ Wood
+ Most plastics

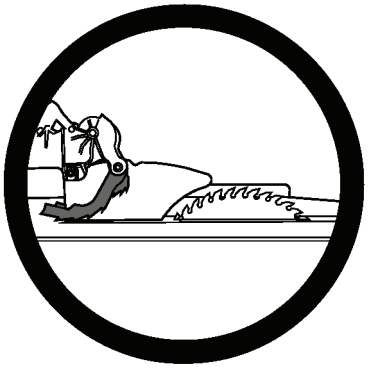
BANNED MATERIALS

- Metal
- PVC
- Pressure treated wood
- Carbon fiber and composites

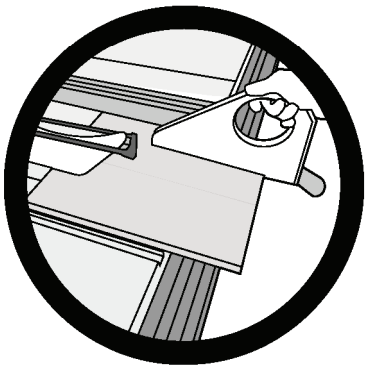
CONSULT MAKERSPACE STAFF FIRST

+ Electrically conductive material
+ All other materials

- Safety glasses required
- Hearing protection recommended (ear plugs or ear muffs)
-



- Wear short sleeves or roll up long sleeves
- Secure any loose clothing (zip up jackets, tuck in strings, etc.)
- Tie up and tuck in long hair
- Remove jewelry and lanyards, etc.
- Do not wear gloves



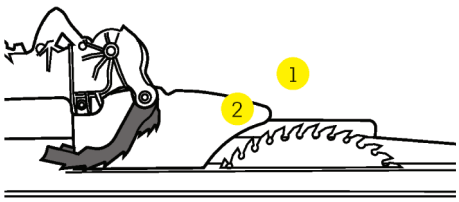
- Use a push stick when your fingers are within 4” of the blade

SAFETY FEATURES

- Riving knife
  - First line of defense against kickback
  - Keeps the wood from pinching on the back of the blade
- Saw stop
  - Has a brake in the inside
  - If metal goes through it completes a circuit and sets off the brake,blades shoots down into the table and needed to be replaced (expensive)

MATERIALS REQUIRING SAW STOP OVERRIDE (MAKERSPACE STAFF ONLY)

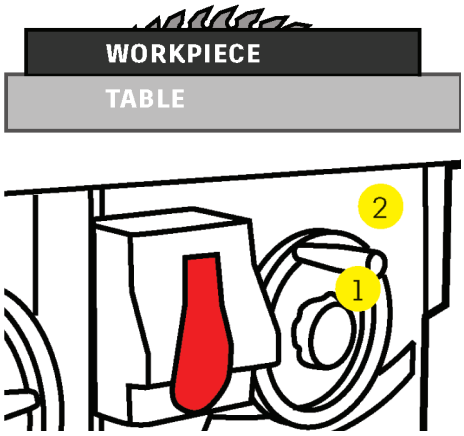
- Metal
- Anything wet
- Treated lumber



KICKBACK

Kickback is when material is thrown violently by the machine. With proper usage of the machine, it can be prevented.

- Only staff can change the riving knife
- Splitter (1) anti kickback pawls (2) > these can cause a dangerous situation
  - Board can get wedged in between them, move it out of the way before starting
  - Splitter can keep a board from kicking back



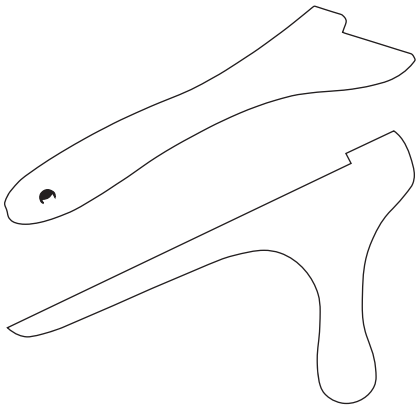
ADJUSTING BLADE HEIGHT

The blade cools itself with the space between the teeth. It should come up 1/2-3/4 inch above your material.

1. Loosen the center lock knob
2. Turn it clockwise to raise the blade and counterclockwise to lower the blade

ADJUSTING BLADE ANGLE

1. Raise the blade to the maximum height
2. Place a combination square up against the blade
3. Use the blade angle adjuster wheel to adjust the blade until the blade is flush against the combo square (90 degrees)



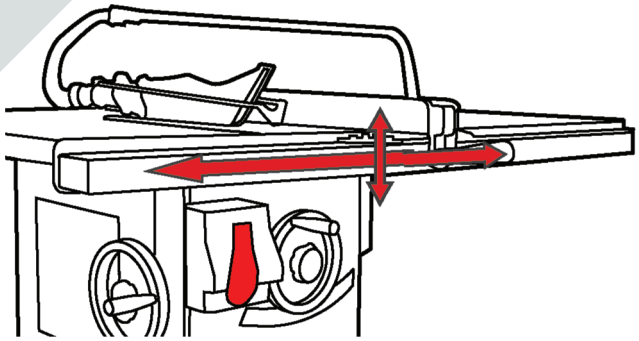
MATERIALS

- What we offer
  - 1/8” plywood
- Common places to buy these materials:
  - SHED Makerspace Materials Shop
  - ID Shop
  - Foundations 3D Design Shop
  - Lowe’s
  - Home Depot
  - Any wood/lumber store

If bringing your own material, you must provide a receipt or MSDS as proof of what it is

TOOLS

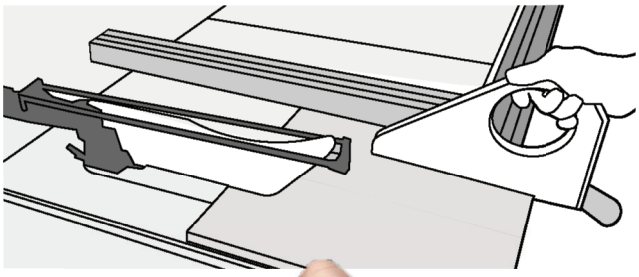
- What you need
  - Push stick
  - Combination square
- Where to get your own
  - Walmart
  - Lowe’s
  - Home Depot



IF THERE IS NO GRAIN, THE RIP CUT IS ON THE SIDE WITH THE LONGER LENGTH

ADJUSTING THE FENCE

1. Lift the handle on the fence to unlock it
2. Move the fence into position
    - Tap it gently for more precise control
3. Push the handle down to lock it in place

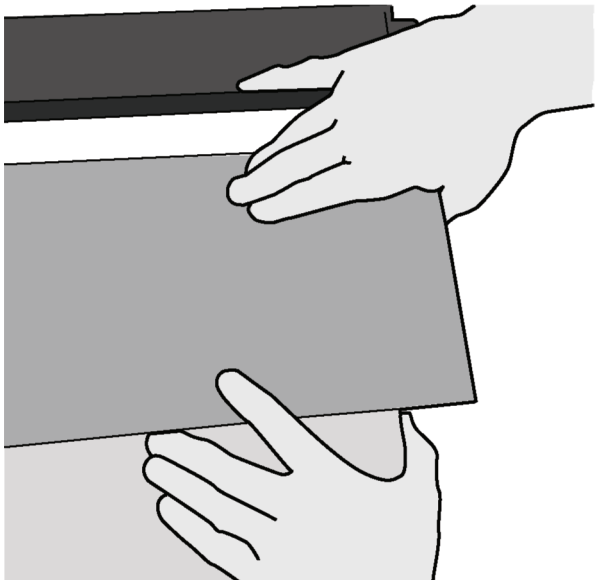


USING A PUSH STICK

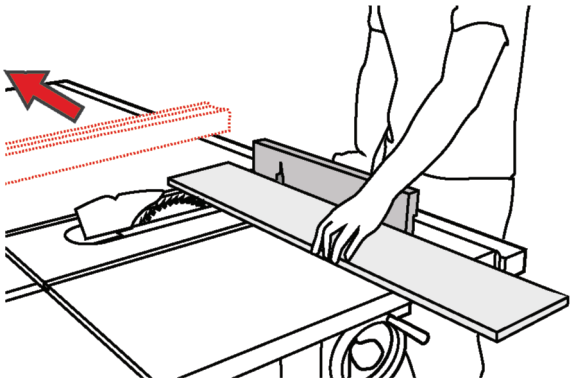
- You must use a push stick when you r fingers start approaching the blade
- Make sure you are holding it properly

KEEPING YOUR FINGERS AWAY FROM THE BLADE

- Recommended positioning
- Left arm is always stationary, right arm is your pushing arm
    - Left guiding hand stays at the edge of the table
    - Pushing in and down on the board
- As your right hand approaches the edge of the table, use the push stick to finish your cut
    - Once you start using the push stick, move your left hand away from the table saw entirely, such as behind your back.



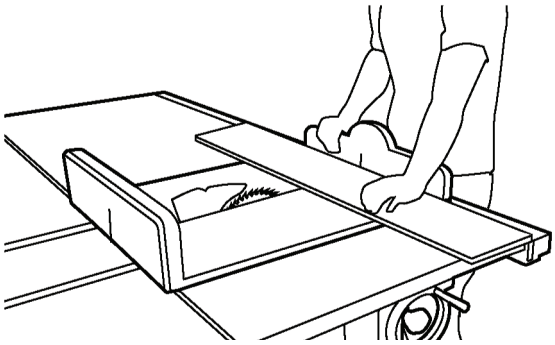
IF THERE IS NO GRAIN, THE CROSS CUT IS ON THE SIDE WITH THE SHORTER WIDTH



MITER GAUGE

- There are different kinds
  - Fits into the slot
  - T slot goes underneath and has a slot built into it

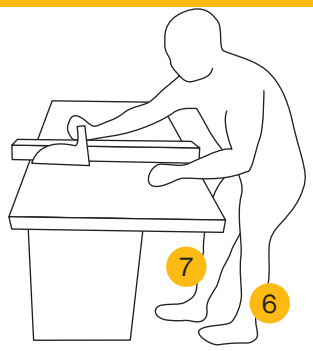
1. Set it to 0 (90 degrees)
2. It should be to the left of the blade
3. Left hand holds the material directly in front of the miter gauge



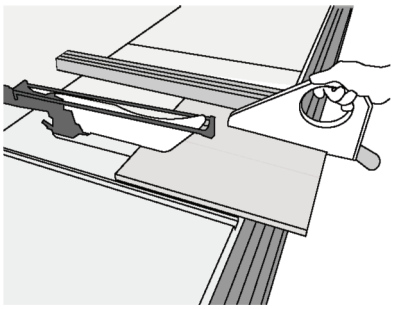
CROSS CUT SLED

- Can't be used with the blade guard
  - This is why the riving knife is important
- Has two runners on the bottom that go into the miter gauge slots
- Left hand holds the wood on the left side and right hand stays on the sled handle

ADJUST BLADE HEIGHT TO AROUND 1/4" ABOVE THE WORKPIECE



KEEP HANDS AWAY, USE A PUSH STICK TO MOVE WORKPIECE THROUGH



LOWER BLADE WHEN FINISHED.

QUICK CHECK BEFORE STARTING

1. Keep a push stick within arm's reach.
2. Mark your board with where you want to cut.
3. Adjust blade angle and height.
4. Adjust fence by bumping it into place for precise and steady adjustment.
5. Drop the blade guard down.
6. Stand with your feet shoulder width apart.
7. Stand close to the paddle so that you can stop the saw with your leg when needed.
8. Left arm is always stationary, right arm is your pushing arm.
    - Left guiding hand stays at the edge of the table.
    - Pushing the board down and into the fence.

DURING THE JOB

1. Flip the switch to turn on the saw.
2. Green light means its ready to go.
3. Flip the paddle up to turn on the blade.
4. As your right hand approaches the edge of the table, use the push stick to finish your cut.
    - Once you start using the push stick, move your left hand away from the table saw entirely, such as behind your back.
5. Push your material all the way through until lit has fully cleared the blade before hitting the paddle to stop the table saw.

CLEANUP

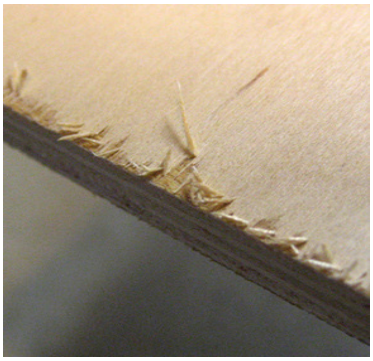
1. Walk around to the back of the table and retrieve your material and cut off.
2. Place the push stick back.
3. Use a brush and dustpan to clear off any scraps and saw dust from the cutting table.
4. Place any usable sized scraps into the scrap bin

MY CUT IS NOT SQUARE

- Make sure that the fence is locked down and you are guiding the material against the fence to maintain distance between fence and blade
- If the problem persists, adjustments may need to be made to the blade or fence

MY WOOD IS BURNING

- Move the workpiece through the blade quicker. Or if you are cutting a hard wood, the blade may be dull and need to be replaced.
- If the problem persists, the blade may need to be swapped by Makerspace Staff.



THE CUT HAS SIGNIFICANT TEAROUT

- Tearout occurs when the grain of the wood isn't sufficiently strong to handle the cutting forces of the table saw.
- Add a sacrificial board or painter's tape on the underside of the workpiece to help take up the cutting forces.
- Sometimes the quality of wood is the issue and the best course could be to prescore the line with a razor blade to help the grain break sooner.

WHEN IN DOUBT ASK A MAKERSPACE STAFF

OSHA® QUICK CARD™

Hazard Communication Standard Pictogram

The Hazard Communication Standard (HCS) requires pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

HCS Pictograms and Hazards

Health Hazard  • Carcinogen • Mutagenicity • Reproductive Toxicity • Respiratory Sensitizer • Target Organ Toxicity • Aspiration Toxicity	**Flame**  • Flammables • Pyrophorics • Self-Heating • Emits Flammable Gas • Self-Reactives • Organic Peroxides	**Exclamation Mark**  • Irritant (skin and eye) • Skin Sensitizer • Acute Toxicity (harmful) • Narcotic Effects • Respiratory Tract Irritant • Hazardous to Ozone Layer (Non-Mandatory)
Gas Cylinder  • Gases Under Pressure	**Corrosion**  • Skin Corrosion/ Burns • Eye Damage • Corrosive to Metals	**Exploding Bomb**  • Explosives • Self-Reactives • Organic Peroxides
Flame Over Circle  • Oxidizers	**Environment** (Non-Mandatory)  • Aquatic Toxicity	**Skull and Crossbones**  • Acute Toxicity (fatal or toxic)

For more information:

U.S. Department of Labor

OSHA® Occupational Safety and Health Administration

www.osha.gov (800) 321-OSHA (6742)

OSHA 3491-01R 2016

RIT Brand Elements collected

These a re some of the elements that we use fr equently . Last updated 092721

Colors

Primary

spot cmyk

Usage: 3 5% 30%

Secondar y

20% 8 % 4% 3

Accent s

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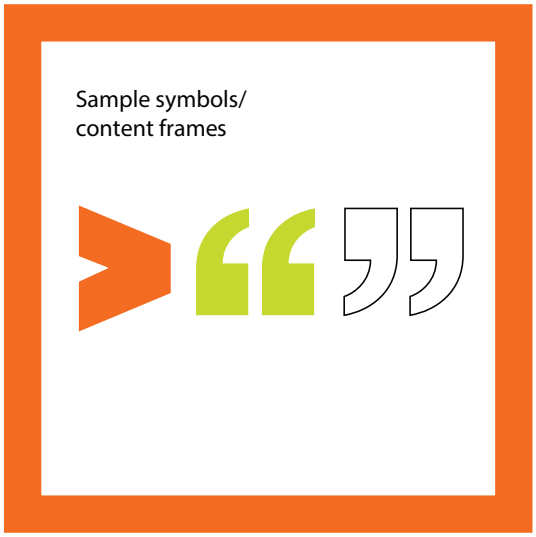
Moving frame edges

Prisms

Closed content frame



Typical frame line thickness is 14 pt. on a 8.5″ x 11″ page

Moving content frame

Content brackets

Orange corner cut style

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The Right Fit

Sample usage of an orange line separator and an open content frame with text