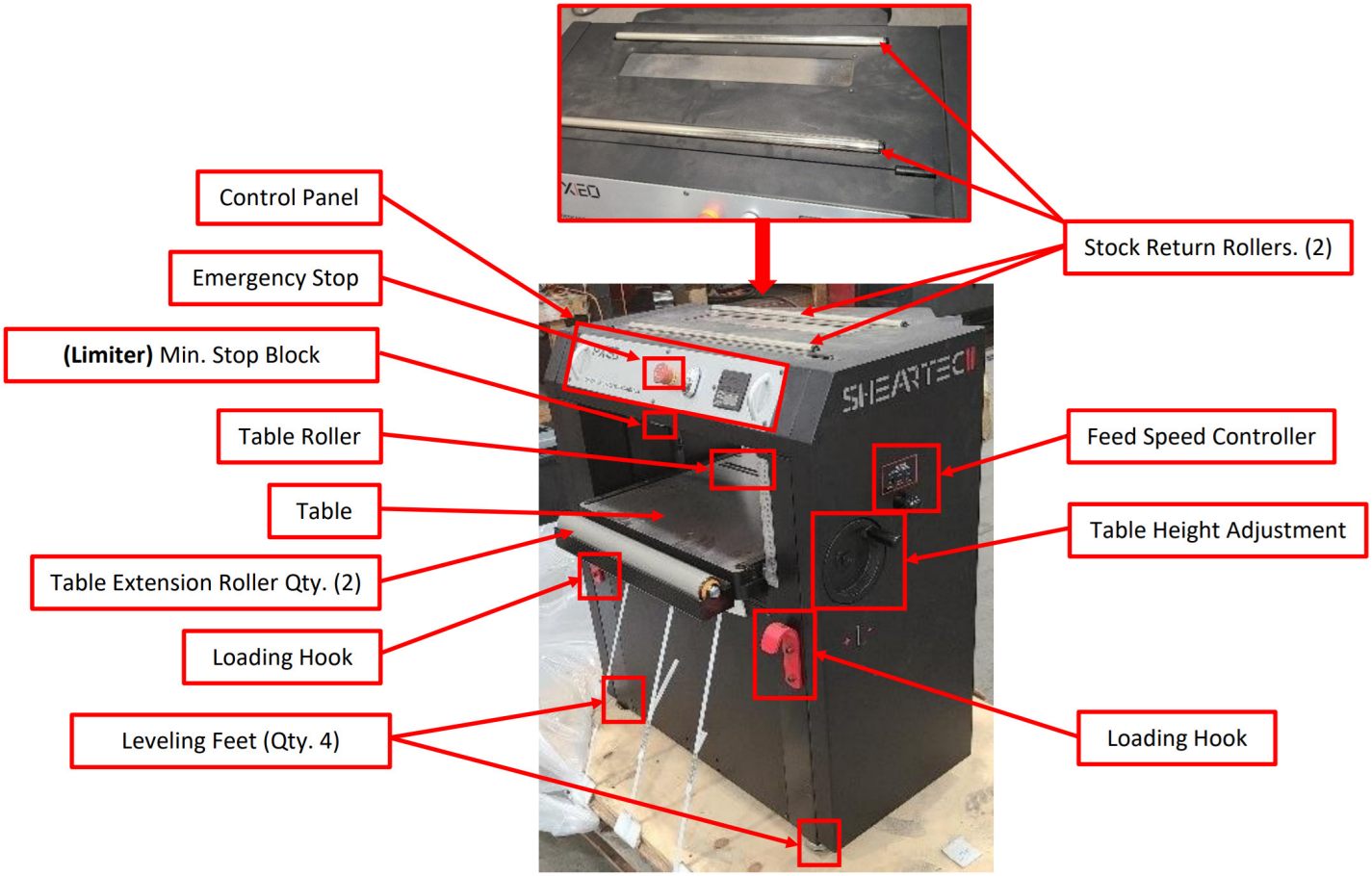
WOOD PLANER

RIT | The Student Hall for Exploration and Development

WOOD PLANER

THE WOOD PLANER LEVELS WOOD BOARDS TO A CERTAIN THICKNESS



MATERIALS

ALLOWED MATERIALS

+ Solid hardwood
  > No nails, staples, or paint

BANNED MATERIALS

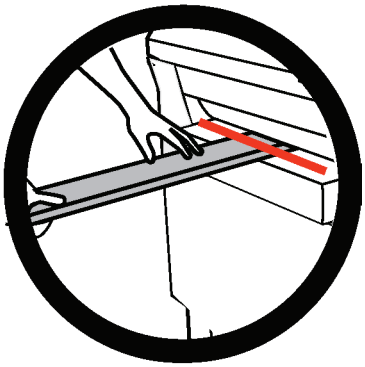
- Any material that isn't solid wood
  > Plywood, plyboo, MDF, etc.
- Painted wood
- Soft wood
- Reclaimed wood
- Pressure treated wood

CONSULT MAKERSPACE STAFF FIRST

+ All other materials

- Safety glasses required
- Hearing protection recommended (ear plugs or ear muffs)
- Mask or respirator is highly encouraged

- 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



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

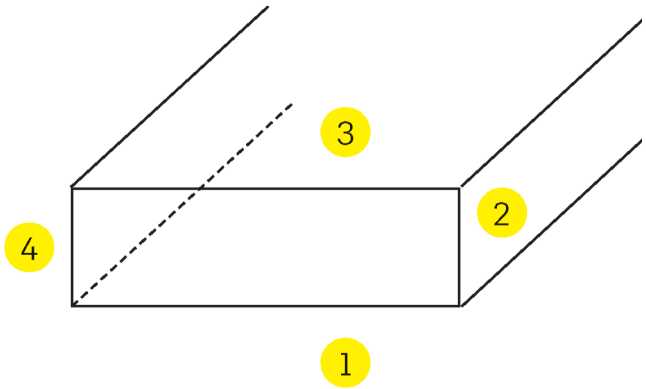
LOADING AND SECURING MATERIALS

MACHINE SETTINGS

- Recommended settings
  - Adjust feed rate depending on material removal rate and hardness of wood.
  - Minimize material removal to 1/16” (.063”) at a time. Removing more material can cause premature wear on the cutting inserts.
- How to change them
  - Knob on side can be pushed and pulled to adjust feed rate. Only adjust while running.

MACHINE PART POSITIONING

- Recommended positioning
  - Planers ideally work along large and flat planes (1 and 3)
  - If planing needs to occur on narrow sections (2 and 4), attach sacrificial boards to the side to increase the base and improve stability. Or opt to use a jointer.
  - Pay attention to grain orientation. Plane workpieces with the grain and avoid planing end grain.



NEVER ADJUST FEED WHILE MACHINE IS OFF

QUICK CHECK BEFORE STARTING

1. Turn on dust collection.
2. Set height via scale to measured thickness.
3. Turn on and zero DRO.
4. Raise table to desired height.
5. Turn on Planer.
6. Adjust Feed Rate (ONLY WHILE RUNNING)

DON'T TRY TO REMOVE TOO MUCH MATERIAL AT ONCE

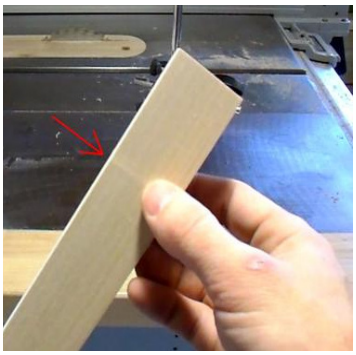
DURING THE JOB

1. Begin feeding wood into planer until rollers take it through
2. Retrieve board on opposite side (use roller stand for longer stock)

CLEANUP

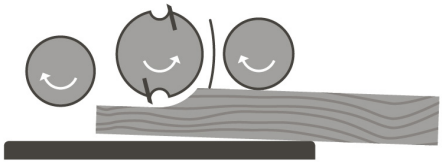
1. Turn off planer.
2. Lower table to get access with brush to clean.
3. Sweep up any wood chips on the floor.

LEAVE MACHINE CLEANER THAN FOUND



MY WOOD HAS RAISED GRAIN AFTER PLANING

- This can be caused by either dull inserts or taking too aggressive of a cut. Reduce pass depth.
- Dull inserts are to be replaced by Makerspace Staff only.



MY WORKPIECE HAS DIVOTS AT THE BEGINNING AND END

- This is called Snipe. It has to do with the engagement of the cutters before and after the roller section. Feeding a similar height board alongside your workpiece can help to eat the snipe.
- If the snipe continues, the rollers may need to be adjusted by Makerspace Staff.

MY WOOD HAS RIPPLES IN IT

- This is caused by the feed rate being too height in relation to the cutter speed. Move the feed rate to the slower speed.

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