

The Brickyard Orientation Handbook

Welcome to The Brickyard Collaborative – the North Shore’s Makerspace!

The Brickyard Collaborative
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Acting Director: Ted Dillard
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Our Board:
Scott Nowka, Chair
Ted Dillard, Treasurer
Sean Leach
Matt Adolph

Welcome to The Brickyard!

First and foremost, the Brickyard is a wonderful community filled with amazing and talented people. We are a small group of folks with common interests working closely together. All members are expected to treat other members with respect and courtesy at all times, in person as well as in online communications on Slack and elsewhere.

Your Membership

You will receive a confirmation email with your registration information and details of your

membership. Please review this to make sure all the information is accurate, and contact us with any corrections.

You will receive an invoice via PayPal email once a month – typically on the 27th or the 15th of the month, depending on when you enrolled. Please pay this promptly. If you wish to terminate your membership or put it on hold, please notify us as soon as possible. 30 days notice is helpful.

The Membership Agreement you've signed and the Waiver of Liability are both pinned in the #member_documents channel in Slack for your reference.

We use Slack almost exclusively to communicate notices and updates to members. If you have issues or need help learning Slack, please reach out. We also use a MailChimp email list for important notices.

Getting In

Access to the Building:

The key to the two doors is in the lockbox. The lockbox code is 2759. Return the key to the lockbox immediately.

All current passwords for access and use are in the Slack channel #passwords.

If you're the last out of the building, lock up using the key.

Access to the Space:

You can have us set up access to our door with a fingerprint, a key fob or a small card. You can always use the keypad code, listed in Slack.

Wifi access: The network is Brickyard 2.4 and Brickyard 5, password is makeSTUFFnow

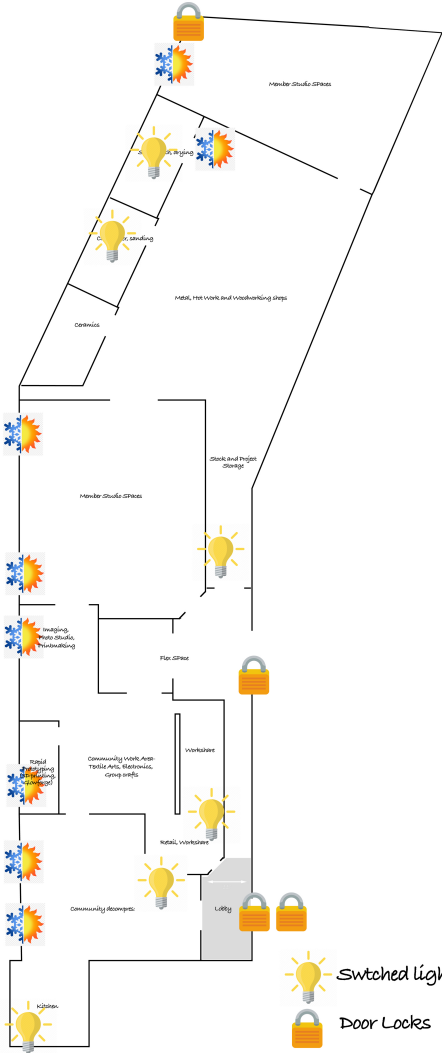
Take a minute to familiarize yourself with the space – learn where the fire extinguishers are, where the first aid kits are, eyewash stations and the rear exits are. If you have questions, ask. You are responsible for knowing this.




Lights are on the switch just inside the door.

Shutting Down:

Turn off the lights, including any task lighting you see on. Make sure the door is locked. Make sure the exterior door is locked as well.

See the image below for locations of HVAC, locks and lights.



-  Switched lights
-  Door Locks
-  Heat/AC units

Working at the Brickyard

General Member Guidelines

Member Responsibilities

- Know the current operation procedures for the equipment. This includes reading the manual on new equipment you may not have used. Ignorance is not an excuse.
- Know the operation for any related equipment. This includes dust collection, ventilation, feed tables, etc.
- Don't leave projects out in the shop. Especially don't leave projects out without labels on it.
- Bring your own consumables. Saw blades, drill bits, sand paper, etc. all have a service life. Bring your own if you are going to be doing a high volume of work.
- Bring your own Personal Protection Equipment. You should have your own Safety glasses, hearing protection, welding gloves, etc when you come to work.
- Take out your trash. The building dumpster is in the front parking lot, the key is next to our main door, on a hook.

Stock, Materials Handling and Shop Safety

- use the provided materials handling equipment for bringing stock into the shop safely.
- Check that walkways and areas are clear of people and projects before you start moving stock.

- Do not bring large loads of stock through the front door. Use one of the two garage doors.

Ready to Use

- Know what "Ready to use" should be. This includes a clean tool that can be used as expected by the next user.
- The space is cleaned and maintained by you, the members. It is the responsibility of each member to clean up after themselves. You should always leave the space in better shape than you found it.
- Plan time accordingly. You know you need to clean up. Clean up will often take 20% of your time.
- If you don't have time to clean up, arrange for someone to clean up after you.

"Ready to use" and cleaning up after your self looks like:

- Sweep the area you're working in when you're done.
- Leave all tools, equipment and surfaces in ready to use condition.
- Wipe down and clean surfaces (don't leave food, glue residue, shavings or scrap).
- Throw out trash and empty full trash cans to the dumpster.
- Put tools and supplies away.

The Community and Giving Back

- You should be trying to spend time giving back to the shop, volunteering based on the time you use the shop. If you spend 20 hours in the wood shop a week, consider giving back 2 hours in some way. Organizing, updating documentation, cleaning and sweeping are some great ways to accomplish this.
- We are a small community of folks with common interests working closely together. All members are expected to treat other members with respect and courtesy at all times, in person as well as in online communications via Slack and elsewhere.
- For questions, concerns or issues, please contact one of the member representatives on the Board, or the Director.

When something breaks...

- If you break equipment or find something broken report it to the appropriate Slack channel. The faster it's reported the quicker it'll be fixed. Send as many details as you can including observations, a diagnosis and links to replacement parts when available
- If you break a tool doing something you know to be wrong, pay for the repair parts and help with the repair.

General Workstation Use

- Please leave the workstation with all apps closed, in "Sleep" mode and ready to use.
- Leave the workstation "Ready to Use" – for Cloud software, if you've logged in using your account, log out of your account and log back in to the Brickyard account. If you don't know the Brickyard login, DO NOT log out of our account to use your account.
- Store your files on your own media, or in a folder on the desktop clearly labeled with your name. You can assume that random files without identification will be deleted.
- DO NOT allow any updates to OS or apps. Notify the Shop Steward if you get update notifications.
- If you use the workstation for personal purposes such as Facebook, email or messaging, you can assume your work is not private or protected. Under no circumstances may you set up a new user account on the workstation – if you do, it will be deleted.
- If you're done with the workstation and printers, shut off the power strip to the area (rear, right hand side of countertop.)

General Shop Rules

Before you can work independently in our shops, you must be certified to use that tool and you must review the Shop Safety and Etiquette

Safety is your top priority when using the shop. If you are not sure what you are doing, ASK.

Make sure you are properly trained on any piece of equipment before you use it.

Wear appropriate clothing and personal protective equipment:

- Long pants, closed-toe shoes, side shield safety glasses
- Pull back and secure long hair
- No lanyards, loose clothing or jewelry.

Shop security and access:

- No one is allowed in the shops without proper training – only authorized individuals are allowed to use equipment
- It's best not to work alone. Notify a "buddy" off-site of your location and activities if you are working alone.
- If you find a piece of equipment is not working properly, unplug or disconnect the equipment and notify the shop supervisor immediately.
- Don't remove or bypass safety features such as guarding and emergency stops.
- Housekeeping – work clean, leave all work areas in "Ready to use" condition.

Emergency Procedures

- Be familiar with emergency stops on all equipment
- Know where the fire extinguishers, First Aid kit and emergency exits are located
- In the event of an evacuation, if it is safe to do so, turn off processes (water, flames, etc.), collect personal items, and calmly exit the building using the nearest exit. Proceed to your assigned evacuation assembly point. If you do not know the location of your evacuation assembly point, ask the shop supervisor
- If you are injured (even a minor injury) – seek medical attention, notify the shop supervisor.

Tool List

Rapid Prototyping:

- FormLabs 3 3D printer
- Monoprice Maker V2 3D printer
- Monoprice Maker Select Plus 3D printer
- Prusa i3 MK2s 3D printer
- Creality Ender 5 3D printer
- Glowforge Plus laser cutter
- Carbide 3D Shapeoko XXL CNC Router
- VaquForm D2 vacuum forming press

Printmaking

- 4-color, 1 station silkscreen printing press
- 4 12x14" frames, 2 20x24" frames
- Risograph RZ220ui printer with Black, Yellow, Kelly Green, Teal, Blue, Fluorescent Pink and Bright Red drums

- RISO Gocco Printing kit

Wood Shop:

- Table Saw
- Drill Press
- Craftsman 12" Band Saw
- Bench/Belt Sander
- 12" Porter Cable Surface Planer
- 6" Craftsman Jointer
- Chicago Electric Compound Miter Saw
- Various hand and power tools

Metal Shop:

- Bridgeport J-Head with 42" table and 2-axis Digital Readout
- HiTorque Bench Mill 5500 with tooling
- HiTorque 8.5x20 Bench Lathe with tooling
- Pit Bull 14" Metal Band Saw
- 4 1/2" Horizontal band saw
- 20-ton Press
- 25 Gal Portable Compressor
- Bench Grinders
- 1" Belt Combination Sander
- 9" Grinder
- Die Grinder
- Micrometers, calipers
- Taps and dies
- up to 1 1/2" twist drills and hole cutters
- X-Y Vise
- Tubing bender
- Central Machinery 36 In. Metal (hand) Brake With Stand

Welding

- Lincoln 200 TIG welder

- Lincoln MIG PAK 10 MIG welder
- Oxy-MAPP mini torch
- Chicago Electric Spot welder

Forge

- 10" x 18" propane-fired forge
- Coal fired forge (outdoor use)
- 2 100lb anvils
- Assorted Forge tools

Auto/Motorcycle/Bicycle

- 2 ton engine hoist
- Hand, power and air tools
- Impact drive
- Torque wrench
- Gear pullers
- Automotive jacks
- Transmission/Motorcycle Jacks
- Stands
- Specialty Bike hand tools

Finishing

- 8' x 10' explosion-proof spray booth
- Paint spray gun (standard)
- Campbell Hausfeld HV2002 HVLP Paint Sprayer
- Sandblasting cabinet with gun
- 30" Ductless Spray Booth
- Powder coating/ Enameling Kiln

Electronics, Misc

- Rigol DS1054Z Digital Oscilloscope
- KORAD KD3005D - Precision Variable Adjustable 30V, 5A DC Linear Power Supply
- 12V power supplies
- Fluke Multi-meter

- 9 complete soldering stations (including 75W terminal soldering iron)
- Li-Ion battery charging
- Dell Inspiron Workstation
- HP Z workstations (2)
- Raspberry Pi 3 Model B+
- Raspberry Pi
- Raspberry Pi Add-ons
- Sense HAT
- Explorer HAT Pro
- Makey-Makey
- Little Bits
- Adafruit Flora
- Adafruit Feather
- Circuit playground
- Adaptive Design's Morse Code for GBoard Hardware Interface Pack
- Electronic components, paper/soft circuits
- Micro:Bit
- Sparkfun Inventor Kit
- Electronic Snap Circuits RC Snap Rover
- 14 in 1 Educational Solar Robot
- Fluke 1910A Multi-counter
- HP 3312A Function Generator Modulator
- K Precision Dynascan 1822 175mhz Counter
- Iwatsu SS 5712 Oscilloscope
- Wavetek 5mhz Pulse Function Generator

Biotech

- Hamilton Bell V6500 Vanguard Clinical Sealed Centrifuge

- Bio Rad 1651754P Laboratory Vacuum Pump

Robotics/Coding/RC

- Complete Coding Lab
- STEM/STEAM Electronics Snap-Circuits RC Snap Rover kit
- assortment of general purpose 12VDC motors
- 2 Channel High Power 30A DC Motor Remote Controller w/remote

Office/CoWorking

- Dell Color Laser Multifunction Printer C2665DNF
- 40" Samsung TV, 48" Sony TV with stand/support
- Workstations with MS Office, Adobe CS, Sketchup (7 total, Win and Mac)
- Sound, video and image editing workstations
- Software: Adobe CS Suite, Sketchup Pro, MS Office, Audacity, SilverFast SE, i1 Profiler w/i1 Pro, XRite Passport

Imaging:

- A complete 5-light studio strobe setup with softboxes, grid spots, stands, booms and backgrounds: 2 ProFoto monolights with others.
- High-resolution digital camera (Nikon D800) with lenses, Canon Digital Rebel, and various film cameras
- Epson Surecolor P8000 44" Wide-Format Color Printer
- Epson V750 Pro Flat-bed scanner (film and reflective)
- LaCie 321 Color-correct display

- Wacom Cintiq 24HD LCD tablet
- Apple 27" iMac with Retina 5K Display Workstation
- Print Mount 40x60" Cold-mount Vacuum Press

Video/Sound:

- GoPro Hero 2
- micro HD video camera
- High-fidelity USB condensor microphones

Textile, Visual Arts, Aerial Photo, Ceramics:

- Janome MB-7 seven needle embroidery machine
- 2 Singer Sewing Machines – model 5825C "School Model"
- 3 Singer "Home" model sewing machines
- JUKI LU-568 (subclass 3) Industrial Sewing Machine
- Brother LS2-B837 Unison Feed – Walking Foot Industrial Sewing Machine
- White Superlock 734DW Serger
- Pottery wheel and kiln
- KAT (Kite Aerial Photography) picavet, JonesFoils KAP Feather, kite
- VEVOR 28inch Vinyl Cutter

A Final Word

There's so much more, not only resources we have for you to discover, but new things we're adding and developing every day, and now you're a part of it. Take a look at our site, www.thebrickyard.org, and check out the blog for a sense of who we are, and how far we've come in a short few years, through thick and thin.

But always, remember what we like to say: "Keep making stuff. Take care of people, play nice and clean up after yourselves."

Now go make stuff!