

# STUDIO USER GUIDE FOR FLAME SHOP

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# INTRODUCTION

# **History**

Pratt Fine Arts Center serves as a lasting tribute to Edwin T. Pratt, a man who relentlessly championed open and equal access to educational and housing opportunities for all of Seattle's citizens. Pratt Fine Arts Center honors his memory by continuing to pursue its mission of making art education accessible to everyone, for people of all ages, all skill levels, and all backgrounds.

Pratt Fine Arts Center began as a modest facility with a big vision to build a community of artists and an educational center providing the tools and the training to support the creation of visual art. Today Pratt stands exactly as its founders envisioned: as The Place to Make Art.

### Mission

Pratt Fine Arts Center makes art accessible to everyone, offering a place for spirited exchange, self-expression and personal transformation through creativity. Pratt is dedicated to fostering artistic development and engagement locally, nationally and internationally. A unique multidisciplinary visual arts resource, Pratt provides education and instruction, community programs and professionally equipped art making facilities.

### Vision

Pratt aspires to extend the visual arts experience to people from all backgrounds, working at all skill levels. Within an extraordinary community of artists, students and patrons, Pratt strives to be a conduit for artistic development, providing pathways to knowledge, support and inspiration and changing the way individuals see themselves and the world around them. Pratt will:

- Be the leading center for hands-on creativity in our region, well-known and celebrated for accessibility, inclusiveness, and excellence in programming
- Be widely recognized as a premier destination for artists to make new work, develop new skills, and become more well-rounded artists
- Foster a synergetic, creative community of people within a unique and dynamic urban campus environment
- Employ a sustainable business model worthy of academic study and serving as a model of idealism for arts organizations nationwide

### **Commitment to Racial Equity**

Pratt Fine Arts Center is committed to racial equity as a core value and ongoing practice. We at Pratt recognize that institutional racism, through conscious and unconscious practices, creates vast disparities in access to publicly funded services, including arts education and support for artists. We commit to allocating resources to the breakdown of systemic barriers and the development of equitable solutions organization-wide.

# GENERAL INFORMATION

### **Conditions for Access**

To become a Studio Artist and access Pratt studios independently, users must meet the following criteria:

- Successful completion of a Studio Access Test
- Current membership at Journeyman level or higher
- Signed Waiver Agreement form on file
- Signed Acknowledgement Form confirming understanding of all policies and procedures herein

# **Waiver Agreement**

Before any student, independent user, or user's assistant is permitted to use the facilities, he or she must first sign a liability waiver provided herein as Appendix A. Studio Artists will be required to turn in signed Waiver Agreements along with signed Acknowledgement Forms (see below) prior to their first studios access. Studio Artists are also responsible for seeing that any permitted assistants sign waivers before beginning work. Once signed, the Waiver Agreements will be permanently on file in the main office.

# **Acknowledgement Form**

Studio Artists are required to read and acknowledge their understanding of all of the policies and procedures outlined in this document. A signed Acknowledgement Form, included here as Appendix B, must be submitted to the front desk, along with a signed Waiver Agreement, prior to beginning access of the studios.

### **Code of Conduct**

All students, studio users, instructors and staff are expected to conduct themselves in a courteous and professional manner at all times by observing and complying with the following:

- Treat each person with respect
- Value the learning experience
- Keep agreements made with Pratt and others
- Enter fully into the experience of working together

The following actions and activities are not permitted on the Pratt premises:

- Abusive or callous behavior
- Damage to Pratt's property
- Dishonesty
- Non-compliance with safety or security rules and procedures
- Intimidation or disruptive conduct

- Possession, distribution, sale, consumption or being under the influence of alcohol or drugs while working at Pratt
- Possession of weapons
- Discrimination or harassment based on race, color, sex, marital status, sexual orientation, political ideology, age, creed, religion, ancestry, national origin or presence of sensory, mental or physical disability.

Failure to meet these expectations or other misconduct will result in disciplinary action up to and including termination of facility use or loss of membership.

### Access Cards

- Studio Artists are granted Access Cards after all of the conditions of access (see above) have been met. Access Cards must be presented at check-in every time and posted in the studio while the Studio Artist is at work.
- As long as a Journeyman or Master Level Pratt Membership remain current and Studio Artists regularly access the studio, the access card will not expire.
   The access card will expire if 24 months have passed since the last access in a studio; in this instance, Studio Artists will need to complete the Studio Access Test again.

Pratt reserves the right to revoke Access Cards at any time. Grounds for revoking access include but are not limited to:

- Violating Pratt's Code of Conduct
- Abuse of the equipment
- Activities that put other renters in danger
- Failure to pay rental fees or membership fees
- Repeated failure to check in at the front desk
- Violation of policies outlined in this handbook or individual studio handbooks

If an Access Card is revoked, its holder will need to arrange with the Studio Manager to be reinstated according to mutually agreed upon terms. In some circumstances, reinstatement will not be an option.

### **Emergency Contacts**

In the case of injury, disaster, or any other occurrence that presents a threat to the well-being of Pratt's inhabitants, call 9-1-1 immediately.

For all other urgent matters, visit the Front Desk or call 206.328.2200. The receptionist will relay your issue to the most appropriate staff person.

### **Using Other Departments**

Access is authorized on a studio by studio basis. In order to use multiple studios at Pratt, Studios Artists must pass the Access Test and meet the requirements of each studio. Unauthorized access of a studio may result in the revocation of privileges.

# FLAME SHOP POLICIES AND PROCEDURES

# \*Availability

The Pratt web site, **www.pratt.org**, has current scheduling information in the Studio Access section under the "glass studios" web page. You can link to the calendar on the web or call the Front Desk and find out about access and availability. \*If a weekend class is scheduled, no renting on Saturday night, and no renting during a week-long intensive class. (Torches and student work is left set up during this time.)

# \*Scheduling

Scheduled classes have priority in the Warm Glass Studio. Accessed users are encouraged to check class schedules before coming in. Reservations are not accepted for the Flame Studio. Plan to unload kilns, clean mandrels, pick up work, or use studio space outside of scheduled class time.

# \*Payment/Check-In

Appointments and payment will be made online to reduce interactions our front desk staff needs to make with the public. After making a reservation, report directly to the studio at your assigned time. Early arrival is strictly prohibited.

For pricing, please see Glass Studio Access Payment and Fees Addendum (next page).

Scholarship: Scholarship recipients will need to become accessed and present their scholarship code before using the studio.

# Glass Studio Access Payment and Fees Addendum

	Time Slots for Reservation	Max # of Users	Fee Per User	
Cold Shop (coldworking)	9:00-11:30	1	\$50	
	12:00-2:30	1	\$50	
	3:00-5:30	1	\$50	
Fabrication	9:00-1:00	4	\$45	
	1:30-5:30	4	\$45	
Flameworking (glass)	9:00-1:00	2	\$30	
	1:30-5:30	2	\$30	
Forging	9:00-1:00	3	\$35	
	1:30-5:30	3	\$35	
Fusing (glass)	9:00-1:00	2	\$60	(includes kiln rental)
	1:30-5:30	2	\$60	(includes kiln rental)
Hot Shop (glassblowing)	9:30-1:15	1	\$200	(1 team per slot)
	1:45-5:30	1	\$200	(1 team per slot)
lewelry & Metalsmithing	9:00-1:00	3	\$35	
	1:30-5:30	3	\$35	
Printmaking	9:00-1:00	4	\$35	
	1:30-5:30	4	\$35	
Sandblaster	1/2 hour min	1	\$30	(hourly rate)
Stone Yard (carving)	9:00-1:00	3	\$35	
	1:30-5:30	3	\$35	
Woodturning	9:00-1:00	2	\$55	
	1:30-5:30	2	\$55	
Woodworking	9:00-1:00	3	\$55	
	1:30-5:30	3	\$55	

<sup>\*\*</sup>If you cancel fewer than 72 hours before scheduled blow slot, you'll be charged a 50% cancellation fee. If you do not cancel your blow slot at least one hour before it starts, you'll be charged for the entire cost of the blow slot.

# FLAME SHOP EQUIPMENT GUIDE

Upon reopening from May  $24^{th}$ , 2021, Pratt follows the Safety Start Guideline. Access Users must read carefully. <u>here</u>

We take this new world very seriously and non-adherence to the policies will result in a loss of access to Pratt classes and AU program.

# Main Oxygen and Propane Valves for the flame working studio

 If you are working alone, or are the first person to arrive, turn on and adjust the pressure of the propane along the wall to the right as you enter the room. At this time there is not a main control valve for the Oxygen.

To Turn On Main Propane:

- Turn pressure knob one turn counter clock wise.
- Turn on the main propane valve.
- Set the pressure to 3-5 psi.

### To Turn on at the Work Table:

- Turn on the valve at the table on the metal pole marked Oxygen.
- Turn on the valve marked Propane.

### Shut Down:

- Turn pressure knob one turn counter clock wise.
- Turn Propane and Oxygen valves off at the table.
- Turn off the main Propane valve on the wall.

In the event you run out of liquid oxygen:

# **Using Backup Oxygen Tanks**

- Slowly turn the valve on the new oxygen cylinder ALL the way open.
- Check for leaks with soapy water.
- Do not use oil or grease on oxygen fittings.
- Check pressure valve.
- Fill out work request form, noting we are using back up oxygen tanks.

If you have any questions or doubts, please ask the glass technician.

# **Changing Oxygen Tanks**

- Turn valve ALL the way off before disconnecting the hose.
- Using the wrench, loosen and remove the hose fitting from the cylinder.
- Screw on the cylinder cap, NEVER attempt to move a cylinder without its protective cap securely on.
- Mark the empty cylinder with an empty ring.
- Remove safety cap from the new cylinder.
- Crack the valve on the cylinder briefly to blow out debris before reattaching the hose.
- Reattach the hose and tighten with the wrench.
- Slowly turn valve on ALL the way.
- Check for leaks with soapy water.
- Do not use oil or grease on oxygen fittings.
- Move empty cylinder to chained cylinder storage area.

# **Lampworking Torches**

The lampworking torches are designed to burn propane and oxygen.
 While in use they should be clamped to the table to prevent them from being knocked over.

# Setting up a lampworking torch:

- Select a torch from the cabinet, clamp it to the table.
- Make sure all of the valves on the torch are closed, do not over tighten the valves.
- Connect the quick disconnect hoses of the torch to the connection under the table.

# Turning the torch on and off: (POPO)

- Open the Propane valve on the torch a small amount and hold the striker 1/4" in front of the torch tip. Strike until the torch lights.
- Adjust the Oxygen to produce a blue flame about 6 inches long.
- Adjust the oxygen and propane to get the desired flame.
- Always turn off the Propane first and then the Oxygen (The premix torches backfire with a loud bang if you do POOP).

# **Torches Available for renters:**

Major/Minor Minor Burners Hand Held Torches

# **Bead Kilns**

The two bead kilns on the work station have a annealing set point of 950 degrees.

# Ramp up:

- Press run
- Press □ to PROG 1
- Press run

# Ramp down:

- Press and hold run until the red light stops flashing
- Release
- Press run again
- Press □ □ to PROG 2
- Press run

Ramp up in the middle of ramping down:

- Press and hold run until the red light stops flashing
- Release
- Press run again
- Press the Press □ to PROG 1
- Press run

Annealing temperature for glass work is 950 degrees for beads or soft glass and 1050 degrees for borosilicate.

# **Paragon Kilns**

Follow directions on the kiln for operation. Program 1 is for Borosilicate and Program 2 is for soft glass/beads.

Program 1	Program 2
RA= full	RA1= full
Of1=980	Of1= 970
HLD1= 13	HLD1= 13
RA2= full	RA2= f∪ll
Of2=1075	Of2= 970
HLD2=.30	HLD2= .30
RA3= 150	RA3= 200
Of3= 910	Of3=850
HLD3= .01	HLD3= .30
RA4= 300	RA4= 300
Of4= 300	Of4= 300
HLD4= .01	HLD 4= .01

- Hand Tools: Pratt provides an assortment of hand tools including: tweezers, strikers, mashers, etc. These are available on the wall separating the fusing and flame working studio. In addition to the hand tools there are some mandrels available for renters. Make sure these mandrels stay at Pratt. The condition of these mandrels varies and you may want to bring your own.
- All Pratt tools have 'Pratt' engraved or marked on them. Users need to
  provide their own respirators and eye protection. Hand tools
  designated for studio renters are available for use only in the Pratt
  Flame working studio.
- <u>Torches:</u> Pratt provides oxygen/propane torches for lampworking and bead making.
- Kilns: Two Bead kilns and two boro kilns are available for use as a renter.
- <u>Specialty Tools and Materials</u>: If you are interested in bringing in tools or equipment (other than hand tools or harmless tools), which could cause a problem for other users or pose potential safety risks, you must contact the Glass Technician a minimum of 3 days before you plan to bring in such tools.
- Mandrels Bead makers bring their own mandrels.

# FLAME SHOP ETIQUETTE

<u>Music</u>: Music selection and volume must be acceptable to other Pratt users.

<u>Talk to the other users working next to you</u>. Make sure you know what the other workers are making and how you will need to share the shop. If you are going to be doing something that could cause harm (such as cutting glass), warn your studio mates so that they can put on the proper protection.

<u>Keep your area clean</u>. Utilize a reasonable amount of space when working on a project and make sure you pick up any unsafe materials (i.e. shards of glass) if you will be out of the room for a significant amount of time.

<u>Clean up</u>. You must thoroughly clean up and must never expect someone else to clean up for you. Failure to clean up and/or abandoning a project for an unreasonable amount of time will be addressed in the following ways:

- 1st incident: The glass studio manager and coordinator will have a discussion with the user and, together, assess the situation.
- 2nd incident: The glass studio manager and coordinator will have a discussion with the user and, together, assess the situation. In addition the manager may ask the user to volunteer 4 hours of their time before their next rental or be charged \$50.
- 3rd incident: The glass studio manager and coordinator will have a discussion with the user and, together, assess the situation. In addition the manager may ask the user to give up a month of studio use.
- 4th incident: The glass manager and coordinator will have a discussion with the user and, together, assess the situation. In addition the manager may ask the user to return their access card and the status will be reviewed by technician, coordinator and/or at the glass users at the next glass users meeting.

# CLEAN UP PROCEDURES FOR FLAME SHOP

If you are the not the only one using a torch, when you are through using your torch simple shut it off, coil up the hose and return it to the cabinet. If you are the only person using a torch, you must follow the procedure below:

- Shut off torch.
- Shut off valves to oxygen and propane on the table.
- Loosen propane valve at regulator by turning it counter clockwise until loose (do not remove screw). Turn off the main Propane valve on the wall. Clean up and put away all tools.
- Ramp down kilns.
- Sweep the area.
- Close all windows, doors etc.
- Turn off the ventilation hood and all lights.

# **Damaged Equipment**

Damage to equipment is an expected event in a learning environment. We expect it to happen, and our only concern is to repair it as expeditiously as possible. If you damage equipment, please notify a technician immediately. If "user error" has played a part, the technician may review the safe operation of the equipment with you. Failure to notify Pratt when you damage equipment only serves to delay prompt repair and cause inconvenience to other users.

# **Equipment Failure**

<u>Kilns:</u> Please check kiln before loading for loose/dangling elements. If two elements are touching they will burn out and the annealer, instead of coming up to temperature, will remain at a low temperature for many hours. <u>If the kiln takes too long to come up to temp:</u> If the annealer is not coming up to the desired temperature quickly enough there is nothing that can be done to hurry it up. You may look inside to see if all elements are bright orange, and note any that are not to report to the Glass Technician. You should either be prepared to wait for a few hours, or abandon your firing and call the Glass Technician. Never attempt to insert a propane torch into an electric annealer to speed it up.

# Glass Pickup Shelves

All pieces taken from a kiln should be moved to the pickup cabinet. Work that has a date more than 14 days old will be thrown away. You should make an effort to remove your work as soon as it has safely reached room temperature, especially if you have large pieces. Please bring your own packing material to transport pieces home, especially if you have a lot of work or if the work is large.

# **FLAME SHOP SAFETY**

# First Aid

Report all accidents, large or small, by filling out an incident report form located inside of the first aid box door. The first aid box is located on the wall between the fusing and flame working studios. Notify a staff person of your injury IMMEDIATELY. This is very important. In the event of a minor burn, immediately run cold water on the affected area for a full 20 minutes, then use a burn cream, or, better yet, gel from an aloe vera plant, and bandage. In the event of a more serious burn, we have an emergency shower located on the column near the corner glory hole in the hot shop or the metal fabrication area. If you have a more serious burn or other injury, you should either call an ambulance or be driven directly to an emergency room. The nearest hospital is Providence, located between 18th and 16th on Jefferson, six blocks north of Pratt. The best route is to turn left out of the parking lot, go east on Main to 20th and turn left, go north on 20th to Jefferson, turn left and go to 18th.

# **Other Safety Precautions**

- Eye Protection: You are required to wear eye protection. If you are
  working on a torch you must wear didymium glasses to protect your
  eyes. If you are cutting glass it is advisable to wear glasses that
  have side shields that protect against reflected light and exploding
  un-annealed shards.
- <u>Heat:</u> Remember, you probably can't see heat. Kilns can be intensely hot and should never be used as a seat or have things stacked on top of them.
- <u>Sharp Glass:</u> Do not leave broken work on glass pickup shelves or work tables where other people can cut themselves.
- No Bic Lighters: Please use only a striker or a match to light torches. Bic lighters may explode.
- No Fuming: Please refrain from fuming, our ventilation does not circulate air quickly enough for this process and will endanger not only yourself, but also others in the room.
- <u>Wear Cotton or other natural fibers Synthetic fibers are flammable</u> and may catch fire while working on the torch.
- Wearing closed toed shoes is required in our studios.
- <u>Tie your hair back It is very easy for your hair to catch fire while</u> working if it comes in contact with the flame or a hot piece of glass.
- <u>Fire Extinguishers:</u> A fire extinguisher is located near the first aid station. In case of fire, use the extinguisher, but be sure to inform the Glass Technician so that it can be serviced for future use.

# \*Staff Roles and Responsibilities

The staff at Pratt is committed to creating a better facility for both the student and the professional artist. It is important that you know who the staff members are along with their respective duties.

- Glass Technician The glass tech maintains equipment, insures
  quality glass in the furnace, maintains supplies of raw materials, and
  is responsible for general policies and procedures in the glass
  departments.
- Glass Studio Manager The studio manager maintains supplies of materials and equipment for classes, develops and organizes curriculums and oversees the running of the flame, kiln, cold and hot studios.
- <u>Chargers</u> There are 2-3 chargers who are responsible for maintaining the level of glass in the furnace and securing the building at night.
- <u>Glass Coordinator</u> The coordinator is responsible for orienting people to the studios, and issuing access cards.
- <u>Front Desk Personnel</u> The front desk person will schedule the use of the fusing and slumping rental kiln, annealers, cold shop and sand blaster time, blow slots, and casting slots, as well as any other special equipment.

# \*Maintenance Request Form

(In case of equipment problems fill out this form, found on the hot shop office door, and leave it there)

PRATT	FINE ART	S CENT	ER		
Work Request / Suggestion Form Glass					
Circle one: HOT SHOP	COLD SHOP	KILN SHOP	FLAME SHOP		
Specific Request (please be	e as detailed as p	oossible)			
Name:			Date:		
		Ph	one:		
Would you like to be notified NO	d when this is res	olved? YE	S		
PLEASE	DO NOT WRITE BE	LOW THIS LINE			
Staff follow up comments:					

# GLASS GLOSSARY

Acid Etch - The process of etching glass using hydrofluoric acid. Note: hydrofluoric acid is extremely dangerous and is not allowed at Pratt.

**Air Twist** - A decoration in which two or more air bubbles are twisted inside the glass.

**Alumina -** A highly refractory material that is used in kiln wash and in fiber products. Melting point 3722° F.

**Alumina Oxide -** A an abrasive media used in sandblasting and glass polishing.

**Alumina Hydrate -** A refractory material with a very high melting point (3704°). It is used in kiln wash and in refractory materials to prevent fusing.

**Anneal** - To reduce the stress in a piece of glass by slowly releasing the heat.

**Annealer** - An oven that goes up to about 900° and then slowly drops in temperature over 8 or more hours.

**Ariel -** Similar to a graal except it is cut more deeply and gathered over to trap air in the cuts.

**Batch** - A mixture of raw chemicals used to make molten glass.

**Bench Blow** - When a glass blower's assistant blows into the blowpipe while the glassblower is shaping the glass.

Bit - A small blob of glass usually being added to a piece as decoration.

**Blocks** - U-shaped fruit wood blocks with a handle used to center and shape glass.

**Blowpipe-** A  $4\frac{1}{2}$  foot long stainless steel pipe used to gather and blow glass. **Cane (Threads)** - Thin glass rods pulled from a molten blob of glass.

**A Canna** – The technique of picking up larger cane on a collar and forming the object out of that material only. The term is also used to describe objects made with this technique. Also called a fili (with lines.)

**Capping -** Placing your hand over the end of a pipe to trap air which will expand due to heat and blow out the bubble.

**Cerium Oxide -** A powdered rare earth metal used on the felt wheel to achieve a high polish on glass.

**Charge -** To put batch or cullet into the furnace.

**Cheater (Button)** - A small button of glass that is applied to the end of a piece to protect the piece from being damaged by the punty.

**Chords** - Bands of denser glass which are usually drawn up from the floor of the furnace.

**Collar –** A gather of glass on a pipe, blown through and made into a disk used to pick up cane for a canna technique. Also used with murrini and graal blanks.

**Continuous Melt Furnace** - A furnace with separate melting and gathering chambers, which can be worked 24 hours per day.

Crown - The roof of a furnace.

Cullet - Broken glass put into the furnace to make molten glass.

**Day Tank -** A furnace whose floor is a liner that hold the glass.

**Devitrification -** A crystalline growth on the surface of glass caused from the glass molecules beginning to align.

**Diamond Shears** - Shear like tool used to make round cuts in glass as opposed to straight cuts.

**Dog House -** The opening through which you charge a continuous melt furnace.

**Duckbill Shears -** Shears with a curved-up end used for trimming lips and other cutting.

**Expansion Coefficient -** A measure of the amount of physical expansion that takes place during temperature changes. Two different types of glass with the same expansion coefficient are usually compatible.

**Fango** –Sea mud used to coat the plates to prevent the cane from sticking to the plate. Locally the best source is Whidbey Island.

**Ferrini** (also ferretti, ferrigi, etc.) – Small pieces of square steel bar used to prevent the cane from rolling off the plate.

**Fiber Products (Frax)** - A blanket-like refractory material that has a high melting point and can be used as insulation on furnaces and annealers or as a malleable surface upon which to place hot pieces in the annealer. Frax can be rigidized with a solution of water (65%) and sodium silicate (35%). One of the major components of fiber frax is silica, which is extremely toxic to breathe. This material must be handled with caution.

**Fining Out -** The process of reducing the number of seeds or small bubbles in the glass. This is usually done by allowing the glass to soak for a long period of time after charging. (see Squeeze)

Flue - The chimney on a furnace.

**Fuming** - The process of introducing a metal oxide into the hot air around a piece for the effect of luminescence. **Note: this is often a toxic process and not allowed at Pratt.** 

**Fuse -** To heat two or more pieces of glass until they fuse together.

**Gaffer** – Lead or head glass worker. The person who directs the work of their assistants.

**Gather -** Drawing glass from the furnace by dipping and rotating a blowpipe or punty in molten glass.

**Gatoi -** A steel or iron plate **with** grooves used for spacing cane.

Glass Line - The highest level the glass should reach in a full furnace.

**Glory Hole -** A small re-heating furnace made of an insulated chamber and a burner.

**Graal -** A piece decorated by cutting through an overlay to create a design and subsequently reheated, blown to its full shape.

Jack Down - To put a neck or crease in a piece with jacks.

**Jacks -** A tweezer-like tool with tips made of steel. Used to make creases and necks and for general shaping.

**Kevlar -** A heat resistant material used on insulated gloves.

**Kiln Wash** - a combination of calcium carbonate and alumina hydrate used to prevent glass from fusing with kiln furniture or slumping molds.

**Kugler -** A trade and generic name for densely colored glass rods. Kugler is one of the main sources of solid color for blown glass. (see also Zimmerman) **Lapping -** The process of putting a flat surface on a piece.

**LFE Controller -** A brand name PID process controller capable of holding one profile which is up to 12 segments long.

**Marver** - A thick steel table used to shape and cool glass. The word marver originates from 'marble' which is what was originally used.

**Mezza Filigrana** (Half Filigree) – the technique of picking up cane on a bubble and twisting the bubble to form a spiral pattern in the cane. Also used to describe objects made with this technique. Also called a retortoli (twisted.)

**Mild Steel -** The type of steel we are most familiar with. Mild steel rusts and burns at temperatures over 1000°. Used as the structural element in most hot glass equipment.

**Mizzou**- A high strength, high temperature castable refractory often used to cast glory hole and furnace doors.

Moile (moil) - The glass left on the blowpipe after you crack off the piece.

**Muller** - A large device used to mix sand for casting.

**Nichrome wire (Kanthol A-1) -** Also known as resistance wire, this wire is used to wind elements for electric kilns and has a melting point around 2500°.

**Olivine** - An infusible neosilicate sand that is often used for glass casting and other procedures where free silica is unacceptable.

**Optic Mold** - An aluminum or bronze mold that glass is blown into to achieve a ribbed look.

Overlay - A thin layer of colored glass on the outside of a piece.

**Oxidation (combustion) -** The presence of excess air in a flame or combustion chamber. In an oxidation atmosphere there should be no flame coming out of the furnace or glory hole.

**Paddle -** A tool usually made of cherry wood and used to flatten glass and block heat.

Paciofis - (pronounced 'par-chovies') Wooden jacks.

**Partlo MIC-6000 -** A process controller capable of storing up to eight 6 segment profiles.

**Pastoral** – A large fork-like tool used to heat cane plates.

**PID Controller -** A controller that controls proportional output using three parameters, gain (proportional band), integral (reset), and derivative (rate). Used in furnaces and usually not in annealers.

**Pi Calipers –** Used to size collars and bubbles for cane and murrini pickup.

**Piera** – Rectangular plates of steel or iron used to arrange and heat cane for pickup.

**Polariscope -** A device employing two polarizing filters, used for examining work for internal fatigue, which appears under the filters as rainbow of color.

**Post** - A gather of glass on a solid rod used to pull the cane gather.

**Pot Furnace -** A furnace that has a crucible to hold the molten glass.

**Profile -** A series of ramp and soak parameters that are entered into a controller to determine a heating or cooling cycle.

**Pumice -** A fine volcanic glass used for polishing. Most common size is ought and a half (0 1/2).

**Punty -** A 4-foot long stainless steel or mild steel rod used to transfer work to after using the blowpipe. A Punty is also a term used for the bottom of a vessel where a mark is left from where the punty rod was attached.

**Quartz Inversion -** The change in the crystalline structure of quartz at various temperatures. During these changes the quartz in glass actually changes in size causing strain.

**Reduction (combustion)** - The presence of excess gas in a flame or combustion chamber. In reduction you will probably see a flame coming out of the glory hole or furnace.

**Refractory** - A material property which indicates a resistance to melting. Common materials that are usually considered refractory are alumina, silica, and zirconium.

**Reticello** (Netting) – The technique of blowing a bubble of a canna twisted in one direction into a bubble of the same number of cane twisted in the opposite direction. The result is a series of air bubbles trapped in between the overlapping gaps in the cane. The term is also used to describe objects made with this technique.

**Sand blasting -** The process of removing, carving, or etching glass with a sandblasting machine.

**Seeds -** Tiny bubbles in the glass (see Fining Out)

**Shards -** Small fragments of colored glass melted into a piece for decoration. **Silica (Si) -** The major component of glass. Free silica which is liberated during grinding and polishing is extremely toxic and has been linked to various cancers and white lung disease.

**Silicon Carbide -** A grit used for grinding glass. Silicon Carbide is a toxic material. Most common grits are 70 for rapid cutting, 220, 400, and 600 for smoothing.

**Slump** - To heat glass until it softens and bends.

**Soffietta -** A cone shaped device used to inflate pieces on the punty.

**Squeeze -** A period at the end of the soak cycle during which the temperature is dropped to about 1900° very quickly before returning to working temperature. The squeeze takes place at the beginning of the day. **Stainless Steel -** An alloy of steel, which contains chromium and is particularly

**Stainless Steel -** An alloy of steel, which contains chromium and is particularly resistant to rusting. The most common alloy is 304 and an alloy, which stands up to heat particularly well, is 316.

**Steam Stick** - A wooden cone shaped tool used to inflate a piece on the punty by force of expanding steam.

**Stones -** Small rocks in the glass, which usually comes from the furnace crown or tank.

**Straight Shears -** Shears made of tool steel which are used to make straight cuts and to trim lips.

**Tweezers -** Used for shaping and pulling glass and for cooling a neck or a punty with a drop of water.

**Underlay** - A thin layer of colored glass on the inside of a piece.

**Vermiculite** - A mica based material that is commonly used in gardening. Vermiculite is heat resistant and can be used to place hot glass pieces on in the annealer or while being worked.

**Wisk brush** – Used to brush cane immediately after pickup to remove any debris on or in between the cane.

**Zanfirico** – Complex cane made by picking up cane on a solid gather and then twisting as the cane is pulled.

# Coffee/Food Establishments Near Pratt

Loosely organized by location (immediate vicinity, International District, 23<sup>rd</sup> and S Jackson St)

# Immediate Vicinity Broadcast Coffee

1918 E Yesler Way (corner of Yesler and 20<sup>th</sup>) Coffee, sandwiches, pastries

# **Moonlight Café**

1919 S Jackson St

Vegan, vegetarian and other Vietnamese full meals and lighter fare

### Seven Star Mini Mart

1917 S Jackson St Convenience store next. door to Moonlight Ice cream novelties as well as the usual chips, soda, candy

# Franz Bakery Outlet

2006 S Weller (20<sup>th</sup> and Jackson St) Fresh donuts, croissants, and bread

# Northwest Tofu Restaurant and Factory

1911 S Jackson St Chinese with vegetarian options

# Wonder Coffee and Sports Bar

1800 S Jackson St, Suite E Ethiopian and International food

# **Dominos**

1800 S Jackson St, Suite D

Pizza chain; 206-325-3230 for delivery

# Plaza Dome El Obero

1712 S Jackson St

Coffee, beer, wine; sandwiches (vegan option), Panini, artisan salads

# **Cheeky Café**

1700 S Jackson St (corner of Jackson and 17th)

**Closed Mondays** 

Asian fusion and comfort food for the masses; breakfast, lunch, dinner; vegetarian options

# G.R.E.A.N. House Coffee and Café

123 21st Ave (Between Fir St and Yesler Way)

Breakfast and lunch; closed Mondays

# 23rd and S Jackson St

# **Starbucks**

Corner of 23rd and Jackson St

Sandwiches, cookies, coffee

# Red Apple

Promenade 23 (at 23<sup>rd</sup> and Jackson St)

Grocery store

### Taco Del Mar

Promenade 23 (at 23rd and Jackson St)

Mexican chain serving Baja style Tacos, burritos, quesadillas, taco salad, etc.

### Subway

Promenade 23 (at 23<sup>rd</sup> and Jackson St)

Hot and cold sub sandwiches; vegetarian options available

### **International District**

# Saigon Deli

1237 S Jackson St

Very inexpensive high quality Vietnamese take-out; Banh mi (sandwiches) and hot food with vegan and vegetarian options; \$1.50 sandwiches—a Pratt favorite!

# Malay Satay Hut

212 12<sup>th</sup> Ave S (go west on Jackson St, go right on 12<sup>th</sup>)
Delicious Malaysian fare with vegetarian and vegan options

# **Tamarind Tree**

1036 S Jackson St, Suite A Highly acclaimed Vietnamese restaurant; 206-860-1404 for take-out orders

# Uwajimaya

600 5<sup>th</sup> Ave S (go west on Jackson St, go left on 6<sup>th</sup>) Food court and grocery Too many options (including many vegetarian) to list

# **World Pizza**

672 S King St (Chinatown) Closed Mondays

Artisanal pizza, many varieties served by the slice; many vegetarian options

# RESOURCE GUIDE

### **Adhesives**

R.S. HUGHES SEATTLE 7031 South 193rd Street Kent, WA 98032 Tel (206) 767-4463

QCM Adhesives and Coatings 930 S. Central Kent, WA 859-0933

# **Arts Organizations**

American Crafts Council 72 Spring St. NY, NY 10013 (212)274-0630

Allied Arts Foundation 4111 E. Madison St. #52 Seattle, WA 98112 206.624.0432

Artists Trust 1835 12th Ave Seattle, WA 98122 (866) 218-7878

Glass Art Society 6512 23rd Ave NW #329, Seattle, WA 98117 (206) 382-1305

4Culture 101 Prefontaine PIS Seattle, WA 98104 (206) 296-7580

Seattle Office of Arts and Culture arts.culture@seattle.gov (206) 684-7171

# Color

Olympic Color Rods 818 John St. Seattle, WA 98109 206-343-7336

Hot Glass Color & Supply 2227 5th Ave Seattle, WA 98121 (206) 448-1199

Gaffer Glass USA 19622 70th Ave South, Unit 4 Kent, WA 98032 (253) 395 3361

# **Hand Tools and Blow Pipes**

Artco 348 N. 15th St. San Jose, CA 95112 (408)288-7978

Blockhead Tools 1825 Franklin St Bellingham, WA 98225 (206) 979-1058

Jim Moore Glass Tools P.O. Box 1151 Port Townsend, WA 98368 360.379.2936

Steinert 1000 Mogadore Rd. Kent, OH 44240 216-678-0028

Spiral Arts, Inc. 901 NW 49th Street Seattle, Washington 98107 206-768-9765

### Hardware Items

Johnstone Supply 18205 Andover Park Way Tukwila, WA 575-0755

Pacific Industrial Supply 2960 4th Ave. S. Seattle, WA 682-2100

# Lampworking

Wale Apparatus Co. 400 Front St. PO Box D Hellertown, PA 18055 (215)838-7047

Frantz Bead 130 West Corporate Road Shelton WA 98584 USA 800-839-6712

# Safety Equipment

Central Welding Supply 841 NW 49th Street Seattle, WA 98107 206-783-2283

# Schools W/ Glassblowing

Haystack Mountain School of Crafts

PO Box 518 Deer Isle, ME 04627 (207) 348-2306

Penland School of Crafts Penland, NC 28765 (704)765-2359

Pilchuck Glass School 107 S. Main St. #324 Seattle, WA 98104-2580 206-621-8422

Urban Glass 647 Fulton St Brooklyn, NY 11217 (718) 625-3685

### Other Materials

Abrasives Northwest Silicon carbide grits 1114 Andover Park West Tukwila, WA 575-0735

Seattle Pottery Supply 35 S. Hanford Seattle, WA 587-0570

Thompson Enamels Box 310, 650 Colfax Newport, KY 41702 (606)291-3800

# **Appendix A:** Waiver Agreement



# WAIVER AGREEMENT

# **INSTRUCTORS AND STUDIO COORDINATORS:**

### FOR ALL PRATT FACILITY USERS:

There is an element of risk inherent in participating in artistic processes, handling artistic materials and operating machinery. Pratt Fine Arts Center takes every precaution to ensure the safety of our facility users. Being an equipment-intensive facility, it is important for users to understand that this equipment can be dangerous if used improperly and/or without teacher supervision. The following general waiver must be signed in order to participate in any educational program at Pratt or to use the facilities as an independent study student.

In consideration of my participation in the educational programs and/or use of the facilities as an independent user, I hereby discharge and forever hold harmless Pratt Fine Arts Center, its Board, staff, volunteers, the City of Seattle Department of Parks and Recreation and all agencies whose property and personnel are used as part of Pratt's educational program and any sponsoring, co-sponsoring or funding agency(ies) or individual(s) for responsibility for any injury, illness, death, damage, loss, accident, delay or irregularity which may be occasioned for any reason whatsoever during the course of my participation. I certify that I am physically able to participate in all the activities for which I am enrolled. We assume no responsibility for losses or additional expenses due to influences beyond our control.

I also give my permission for Pratt Fine Arts Center to use without limitation or obligation: photographs, film footage, tape or video recordings which may include my image or voice.

### FOR STUDIO USERS ONLY:

I have read and agree to the policies and guidelines set forth in the Procedure and Policy Handbook for Users. I understand that failure to abide by the policies and guidelines may result in cancellation of my usage privileges. I further understand that damage to equipment and/or facility due to misuse or negligence will be my financial responsibility.

	PLEASE PRINT	
Name:		
Address:		
Course Title:	Course #:	
Instructor:		
	CONTACT IN CASE OF EMERGENCY	
NAME:		_
PHONE #:		
	DATE	
(tor youth under 18, po	arent or guardian name and signature on waiver required)	

# Appendix B: Code of Conduct



# Code of Conduct for All Pratt Constituents

All students, studio users, instructors, and staff are expected to conduct themselves in a courteous and professional manner at all times by observing or complying with the following:

Treat each person with respect.

Value the learning experience.

Keep agreements made with Pratt and others.

Enter fully into the experience of working together.

The following actions cannot be permitted because of their impact on students, teachers, artists, patrons or coworkers:

Abusive or assaultive behavior. Causing damage to Pratt's property. Dishonesty.

Failure to comply with safety or security rules and procedures.

Intimidation or disruptive conduct.

Possession, distribution, sale, consumption, or being under the influence of alcohol or drugs while working at Pratt.

Possession of weapons.

Sexual, racial, or gender harassment.
Theft and/or non-payment of fees.

Failure to meet these expectations or other misconduct may result in disciplinary action up to and including termination of facility use or loss of membership.

For a copy of the Pratt Fine Arts Center Code of Conduct Policy, please contact Human Resources.

# **Appendix C**: Acknowledgement Form



# STUDIO ARTIST ACKNOWLEDGEMENT FORM

Congratulations on becoming a Studio at Pratt Fine Arts Center!

The Studio Access program at Pratt Fine Arts Center is designed to help practicing artists by offering affordable access to shared studio space and equipment. The program is distinctly unique and is not offered anywhere else in the region.

All of us at Pratt go to great lengths to maintain the studios and make sure that they are being used properly. As a new Studio Artist at Pratt, you now share in that responsibility and we expect that you will treat the facilities with the highest level of care, adhering to all of the standards set forth in the Studio User Guide.

As a Studio Artist with studio access privileges, you are required to read each section of the user guide and comply with its directions. Should you have any questions or concerns about any of the information provided, please discuss them with the appropriate Studio Access Coordinator. Once you are certain that you understand all of the requirements set forth in the guide, sign the acknowledgement below and turn in the form with your Waiver Agreement prior to your first studio access.

its entirety. I assert that I unde	knowledgement that have read the studio user Guide in stand the policies, practices and procedures described tent and complete compliance.	
	(Print)	
Studio Artist Name		
Studio Artist Signature		
 Date		