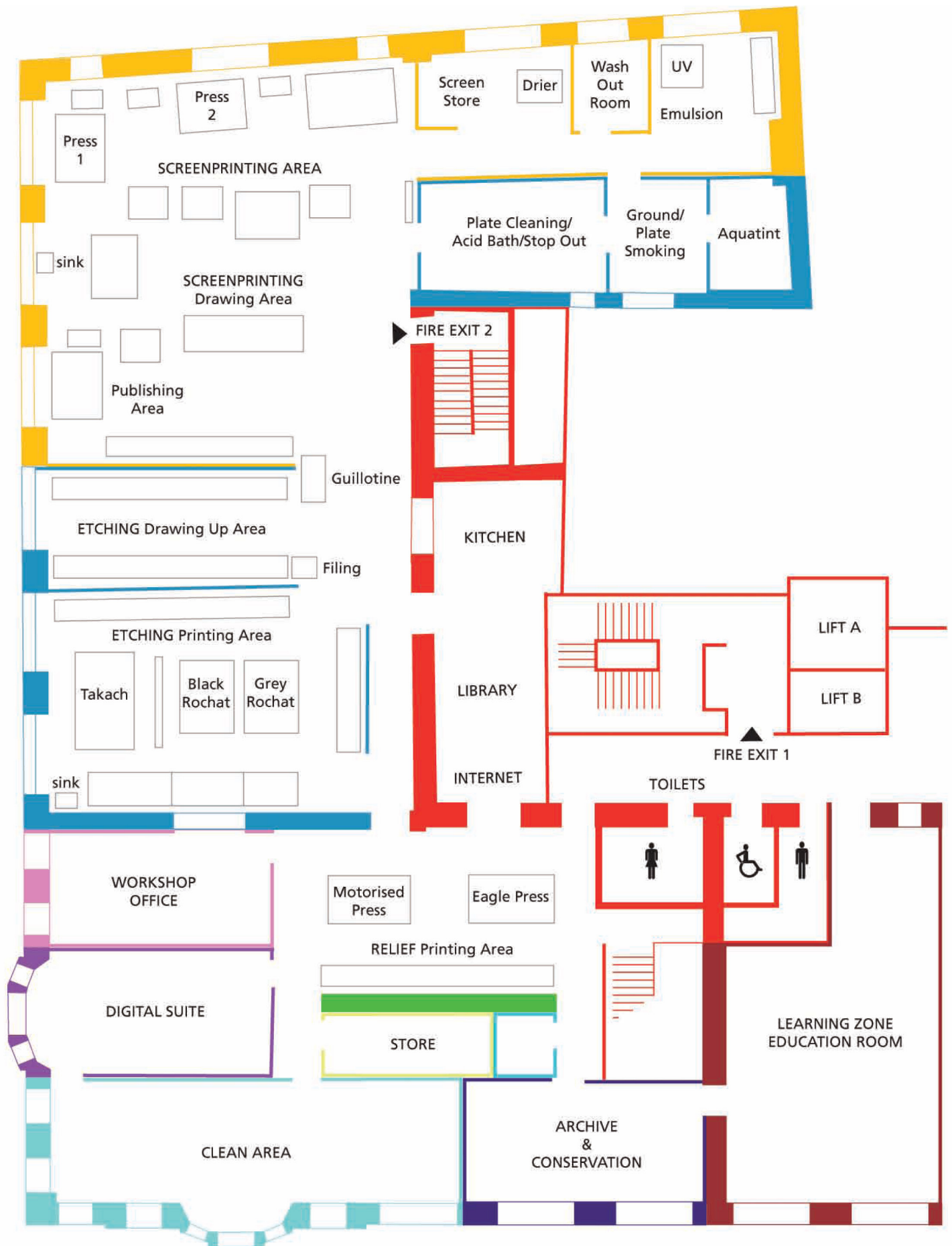


Glasgow Print Studio - Relief Printing Handbook

Introduction to Relief Printing Beginner/Refresher Course Guidelines

Glasgow Print Studio Workshop Floor Plan



HEALTH & SAFETY

TO ALL TUTORS AND STUDENTS. PLEASE READ CAREFULLY.

The first aim is to teach the fundamental process of the medium, ensuring that by the end of the course the student is competent to use the facilities safely and without supervision.

The second aim is to make sure that the student is aware of matters relating to health and safety in the workshop. Each student must be told of the hazardous nature of specific chemicals in use and if they may be more at risk (see list below.) Each student must comply with procedures put in place for their own protection use of gloves, face masks etc.

The third aim is to make sure that the student fully understands the importance of clearing up all their own mess and put away all items used including tools and inks.

The final aim is for all to benefit from and enjoy the class.

TREAT ALL SUBSTANCES AS POTENTIALLY HARMFUL!

- **Printing inks;** can contain poisonous metals and carcinogenic substances.
- **White Spirit;** carcinogenic.

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- * High risk groups include pregnant women, nursing mothers (we recommend that neither of whom should be in the workshop) women of child bearing age and persons with allergies and sensitizations. For advice contact Claire Forsyth at the Glasgow Print Studio or see the folder of Health and Safety Material Data Sheets in the kitchen for more information.
 - * Failure to complete the course or to meet the required level of efficiency may mean that the GPS will be unable to consider requests for membership or to allow current members use of this facility.
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There are two fire exits from the workshop and are clearly marked. If the fire alarm sounds, please evacuate immediately, taking care not to use the main stairs down to the gallery, and proceed to the assembly point which is outside Avant Garde Bar on Parnie Street. Toilets are situated outside main workshop door on the right. No smoking restrictions are in place at the GPS.

EQUIPMENT



PRINTING PRESS

Columbian eagle press 29" x 44" BOOKABLE

RELIEF PRINTING TECHNIQUES

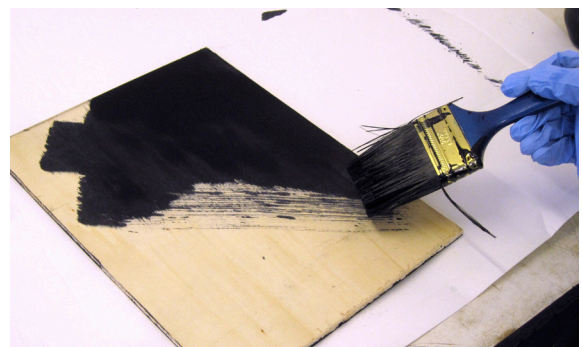
1. PREPARING A BLOCK

Woodcut relief prints can be made from any flat surface capable of being easily cut. A wood which has an even grain, pear, sycamore or beech is not too hard and gives good results. For this class plywood will be used as this is readily available and a less expensive alternative.

Linocut, although similar in principle to woodcut has distinct differences that assert linocut as a valid medium in its own right. Lino is a smooth material that cuts more easily than wood in any direction. It permits a free handling that has given lino print a broad appeal. Usually conceived as a medium suited to printing large areas of colour and bold lines, it is also possible to etch into the surface using caustic soda. This when printed gives a tonal effect similar to a course aquatint.

Wood engraving is also a relief printing method. As the wood has to be harder to allow cutting of very fine detail, slow growing woods such as box or cherry are used. End grain blocks are also required instead of cross grain. This makes them very expensive and as they are also very labour intensive they tend to be much smaller in scale.

Firstly, to prepare the block it has to be stained with black drawing ink.

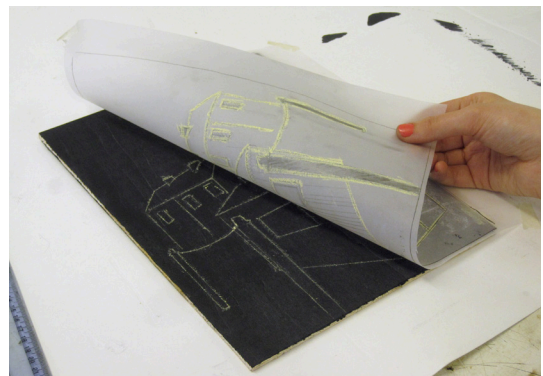


RELIEF PRINTING TECHNIQUES

2. TRANSFERING THE DRAWING

After the block has been stained with black drawing ink, a design or image can be sketched onto the surface with white chalk.

Alternatively an image can be traced and transferred from another source (photo, sketchbook etc). To do this carefully draw an outline around your block onto a sheet of lightweight tracing paper. Place the tracing paper over your source material and trace the image with a dark pen. The front of the tracing is then rubbed with white chalk. Flip the tracing over (reversing it) and place it carefully over the block lining it up with the previously drawn outlines. Tack it in place with a two small pieces of masking tape and when the drawing is retraced the chalk will offset onto the block. Always remember to reverse the image as the print will be a mirror image of drawing on the block.

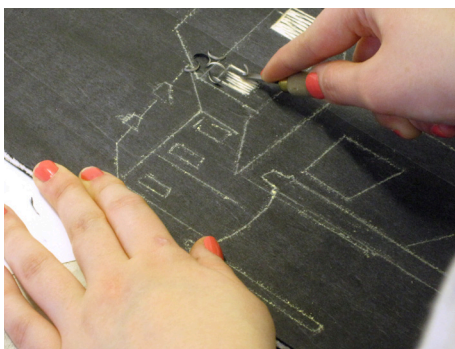


3. CUTTING THE BLOCK

With a sharp woodcut knife the undrawn areas are cut away up to the edges of the image. Large undrawn areas can be cleared with a larger chisel or gouge. NEVER cut with a tool towards your fingers or body as this could result in injury. ALWAYS cut away from yourself. When complete, the lines and areas forming the image all stand proud, or in relief to the rest of the block.

If planning more than one block (for other colours), it is usual to cut the main or "key" block first as this often contains most of the image. This block, however may well be printed in a darker ink and therefore nearer the end of the printing sequence (see section 6 for more info).

Once the key block has been cut and proofed (and is considered finished), information from it can be transferred from it to other blocks for colour. At this stage you can either use your original tracing and retrace it onto your secondary blocks, or take a rubbing/tracing from your key block, chalking the back and retracing as before. If taking a rubbing or tracing from your key block don't flip the image over as it has already been reversed.



RELIEF PRINTING TECHNIQUES

4. SETTING THE PRESSURE ON THE PRESS

The pressure is adjusted by providing more or fewer backing boards under the block when it is on the bed of the press. Having positioned the backing boards on the press, the un-inked block is positioned dead centre on the bed. The block must always be placed dead centre or it will fail to print properly.

Several flat sheets of newsprint, together with a sheet of stiffer card are placed on top of the block. Wind the lower handle slowly so that the bed slides fully under the "platen". Gently pull the upper handle towards you. Adjust the pressure if necessary (more or fewer backing boards) so that the handle feels stiff towards the end of its travel.

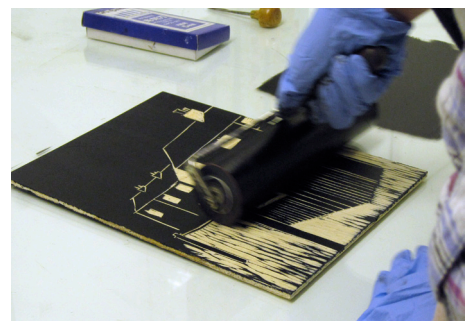
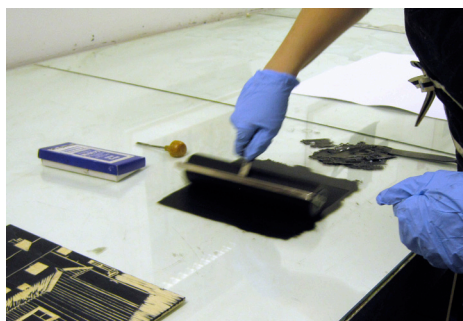
When the pressure is correct you should have to carefully exert extra pull at this stage. If the handle cannot be pulled all the way across the pressure is too great. Treat the press with respect at all times and NEVER use force, rapid jerking movements or extreme pressure. Cast iron is strong but very brittle.

Setting the pressure should be done before the block is inked up and is tested by trial and error.



5. INKING THE BLOCK

The block is made ready for printing by charging a roller with ink and passing it over the now raised surface of the block. The ink should always be quite stiff otherwise it will gradually run off the surface filling up the cuts and print sharpness along with finer detail will be lost. Woodcuts are usually printed on a platen press of the type traditionally used for printing books. In this way, woodcuts could be set up with type to print illustrated books. When properly set up the woodcut can print many impressions. Litho / relief inks used for relief printing at GPS are very pigment intense, therefore 30-50% extender should be added to make the ink more economical. If using oil based inks, two or three drops of cobalt driers should be also added when mixing secondary colours.



RELIEF PRINTING TECHNIQUES

6. REGISTERING THE BLOCK FOR PRINTING

There are various methods of registering the printing so that the block prints in exactly the same place on every sheet of paper. This allows for accurate registration of secondary blocks which are used to print other colours. If printing other colours, it is advised to print the palest colours first and finish with over printing the darkest colour. Make sure each colour is fully dry before overprinting more colours.

Use an "L" shaped registration bar that has "stops" fixed to it that correspond to the sizes of the desired paper margins around your printed image.

Place the inked block face up in the centre of the press bed. Carefully position the registration bar so that the block sits flush within the "L". Making sure that nothing moves out of position, place a sheet of printing paper up against the stops on the registration bar and carefully lower it onto the block.

Print as many sheets as required re-inking the block as consistently as possible between each "pull".

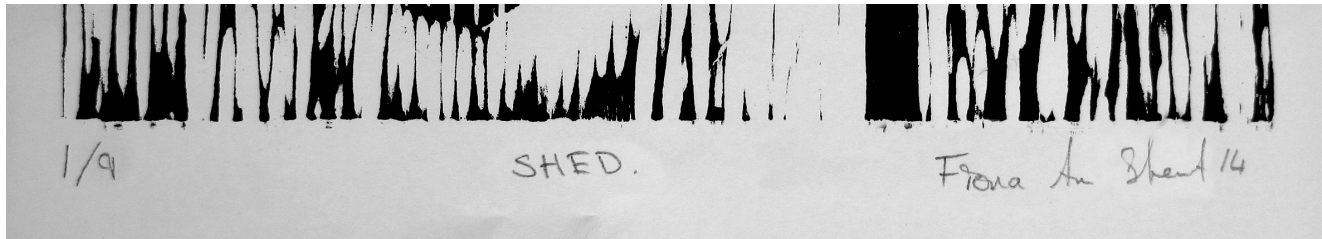


7. BURNISHING

Relief prints can also be printed without a press by burnishing. The paper is gently pressed down onto the inked block and rubbed firmly with a barren, which is a flat piece of bamboo leaf covered wood. A wooden spoon does just as well. With lighter weight papers, this works well but can be time consuming when printed in quantity. It is useful for taking proofs during the early development of the block. Burnishing can however be employed for great subtlety of handling during the printing stage, allowing for instance a variety of tonal quality to be pulled from a single block. Japanese artists have traditionally used this method of printing beginning during the Ukiyo-e period, creating prints of great richness of colour and line.



RELIEF PRINTING TECHNIQUES



8. EDITIONING & SIGNING PRINTS.

It is important to make sure that you are signing your prints correctly. Although this can be endlessly confusing, a few simple guidelines can suffice if adhered to. Always sign prints in pencil on the lower margin. The edition mark (2/30; 4/10 etc) is usually to the left with the title in the centre and the signature to the right.

Another edition mark you can use is A/P. This stands for artist's proof. They are extra to the total in the edition and should not exceed 10% of the size of the edition or five in number whichever is the greater.

Don't be tempted to sign one off or hand coloured prints as monoprint or monotype. These are recognised techniques and do not solely mean that there is only one of them. Hand coloured etchings, woodcuts etc., should be signed with the usual edition numbers and can be followed by the letters V/E (see below).

There are a host of other marks which can be useful but are best avoided unless you are sure of their meaning and why you are using them. Remember, you are bound by the law not to extend an edition size or re edition an image once completed without changing it. To do so is fraudulent.

Other edition markings you could use are:

A/P - Artist's Proof - for the artist's personal use. Normally 10% of the edition size or up to five in number, whichever is the greater.

P/P - Printer's Proof - for the printer.

B.A.T. - Bon à Tirer - means "Good to Pull" in French, and is the guideline image against which the rest of the edition are matched for quality and colour.

H/C - Hors Commerce - means "Outside of Commerce" in French, meaning it is not for sale but is used for display or photography.

S/P - State Proof - a working proof which is pulled during the process to show the development of the image.

V/E - Varied Edition - used on hand-coloured and variously inked prints, where colour will vary between prints. The letters V/E are added alongside the edition number.

Archive - Archive Print - this is used at GPS to show the print is for the Archive collection.

Chop Mark – This is an embossed mark made on the paper to show the workshop the edition was printed in. At Glasgow Print Studio we use an image of an eagle, which is usually found at the bottom right corner of a print. Some artists also have their own chop mark.

RELIEF PRINTING TECHNIQUES

USING THE WORKSHOP INFORMATION THAT YOU SHOULD KNOW

If you have completed the class to the satisfaction of your tutor, you will be able to join the GPS and work in your chosen area under your own steam. Conditions of membership state you should be able to work safely and efficiently on your own. However, there is always staff on duty for quick queries.

Your contact in the workshop is Claire Forsyth. The names and photographs of staff on duty are displayed in the workshop.

All new members are required to attend a workshop induction, this usually last 1-2 hours and will familiarise you with working independently in the workshop. Membership payment will also be required at this time.

Please contact Workshop Manager, **Claire Forsyth** to book an induction.
workshop@glasgowprintstudio.co.uk or tel **0141 559 6911**.

WORKSHOP COMMON SENSE

You are bound by the conditions of membership to work in the workshop in a safe and considerate manner. Think about other users and how your actions may affect them.

Please maintain good professional practice by ensuring that you leave all the areas that you have worked in both clean and tidy. This includes cleaning up any inked surfaces using Mr Muscle that we provide, cleaning spilled ink, placing used blue roll in the bin, removing used acetate from all areas, etc. Mr Muscle and blue roll is provided for you to use for these tasks. Please ask the workshop assistant or manager if you are unable to locate these items and we will happily re-stock the area with more.

USE PROFESSIONAL PRACTICE AT ALL TIMES, IF YOU HAVE GOT ANY DOUBTS ABOUT PROCESSES OR STUDIO PRACTICE YOU MUST ASK A MEMBER OF STAFF

USEFUL SUPPLIERS/CONTACTS

Intaglio Printmaker www.intaglioprintmaker.com

TN Lawrence www.lawrence.co.uk

John Purcell Paper 02077375199 www.johnpurcell.net

Thanks to the learning and workshop staff at Glasgow Print Studio
