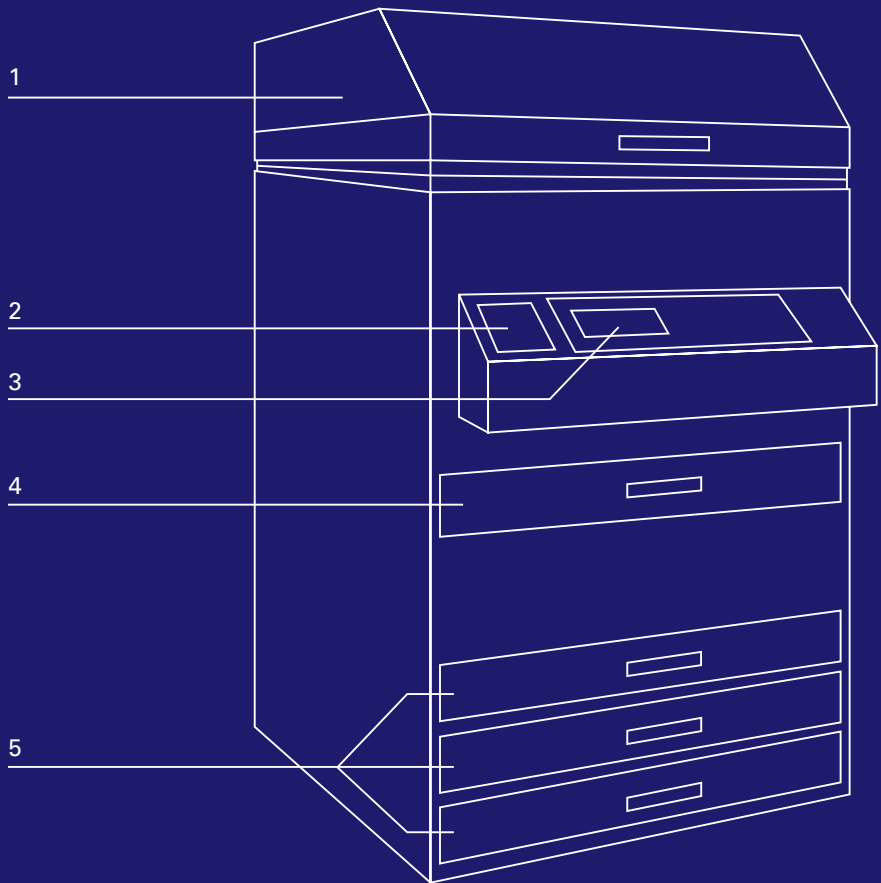


## PHOTOPOLYMER PLATEMAKING FOR LETTERPRESS

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1	Washout Unit
2	Emergency Stop Button
3	Control Panel
4	Exposure Drawer
5	Dryer Drawers 1-3

Photopolymer plates are ideal to add visual elements to letterpress. This includes logos, rasterised images, experimental type and language-specific glyphs which are unavailable in the workshop.

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### How it works

Photopolymer is a light sensitive material. First, you need a black and white negative of your image. Where your negative is transparent and lets through light, the plate will harden and form a raised area that you can print from. The plates we use at LCC are by Toyobo.

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### Health & Safety

- a Always consult with your technician before using the platemaker. They will supervise you during the process.
- b Remove the cover from the washout unit. Ensure that the washout unit is filled with water, there are no spillages around the machine and that it is connected to power.
- c Wear an apron and keep a clean rag ready.
- d You need to work quickly, as unprocessed photopolymer plates are sensitive to light exposure. Before removing the plate from the UV-light safe bag, make sure that you have your negative ready and that the platemaker is switched on.

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#### Buying your plate

Before buying a plate, you need to agree on the right size with your technician. You can pay for your plate online on the eStore. The price of your plate includes the cost of the negative.

#### Payment instructions

→ [estore.arts.ac.uk](http://estore.arts.ac.uk)  
→ Product Catalogue  
→ LCC  
→ Printmaking Studio  
→ Letterpress  
→ Toyobo Solar Plate

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<b>A4</b>	£ 11.64
<b>A5</b>	£ 5.80
<b>A6</b>	£ 3.00
<b>A7</b>	£ 2.00

### 1 Preparing your file

Ideally, you will create your design in a vector-based programme such as Adobe Illustrator. If possible, use Adobe Photoshop for image preparation only. You can find detailed instructions on how to set up files correctly on Boxcar Press: [www.boxcarpress.com/file-preparation](http://www.boxcarpress.com/file-preparation). Discuss your image or file with your letterpress technician before going into too much detail, so you can identify problematic areas early in the process. Invert your file when you are finished to create a negative of the image.

### 2 Printing the negative

To achieve the best quality, you should print your negatives with the Epson SureColor P6000 onto dryfilm. This service is available in the Printmaking Workshop (W304). Trim off the corners of the negative and flip it.

### 3 Preparing the plate

Take the plate you will be using out of the UV-safe bag it is stored in. Peel the protective film off the polymer plate. The side that was covered by the film is the light-sensitive, matte side. Place the plate in the centre of the exposure drawer, **light-sensitive** side facing up. Place the negative, emulsion side down, onto the plate. The image now has to be **wrong reading**.

#### Limitations

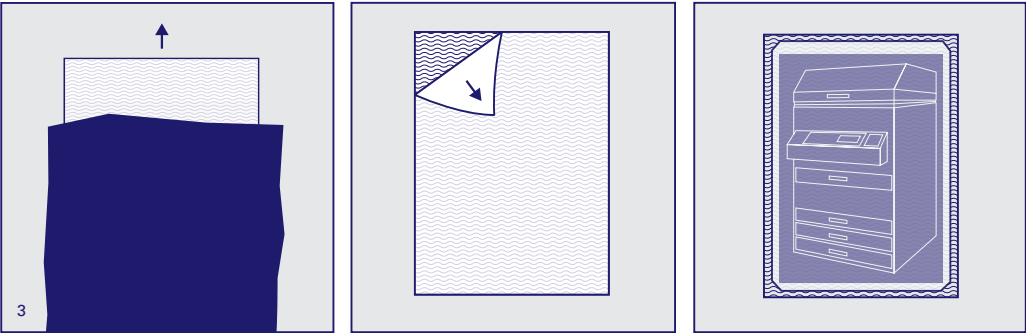
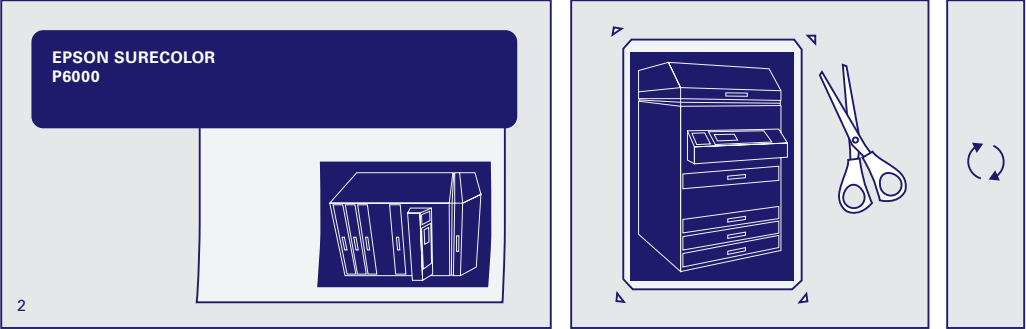
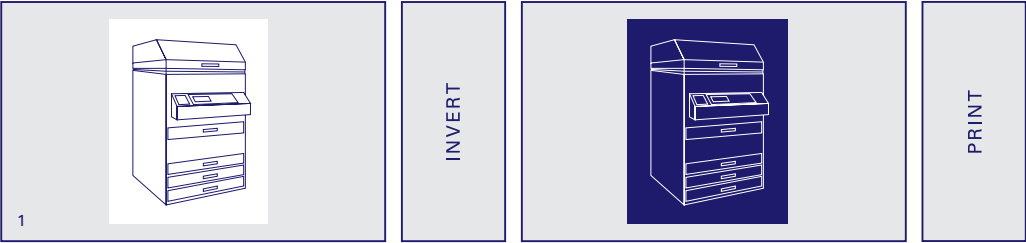
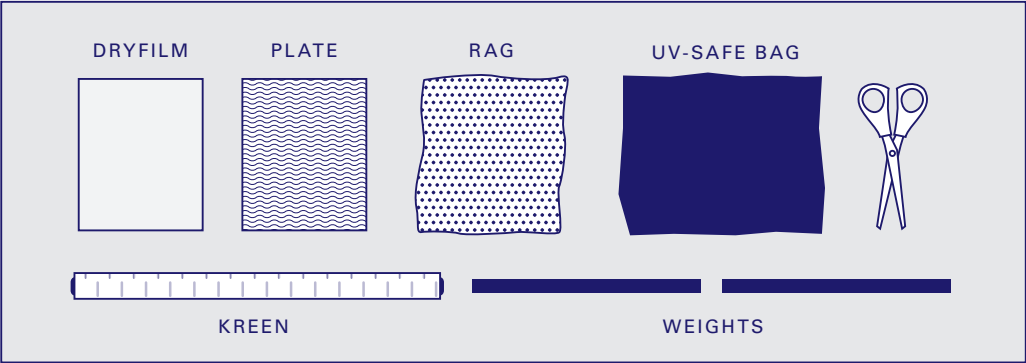
There are limits to how fine the dots and lines on your plate can be. If they are too small, you will likely lose detail during the washout process. To check small fonts, compare the thinnest stroke width to a line you have drawn in your programme.

**0.4 pt** min. line thickness

**1 pt** min. diameter of standalone dots, for example above an 'i'

**6-8 pt** min. fontsize, depending on the weight of the type. Remember to check the thickness of any serifs!

FILE AND PLATE PREPARATION



#### **4 Exposure**

- a Activate the vacuum. Roll the kreen tightly across the plate and the negative and secure it with the hooks at the front of the drawer.
  - b Ensure that the vacuum is strong: The vacuum gauge should read xxxx. To increase the vacuum, place weights just outside of the vacuum bed.
  - c In the menu, choose Main Exposure, select the appropriate programme and press Start.
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#### **5 Washout**

After exposing, remove your negative and fix your plate centred onto the tacky back plate on the lid of the washout unit. Close the unit, select Washout on the menu, choose the appropriate programme and press Start. When the cycle is finished, immediately open the unit and take the plate off the tacky back.

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#### **6 Dryer**

Use a clean, lint-free rag to gently dab polymer residue and excess water off the plate. Place the washed plate in one of the three dryer drawers. Select the correct dryer unit on the menu and start the drying process.

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#### **7 Post-Exposure**

Once your plate is dry, place it in the exposure unit. There is no need for the vacuum, kreen or negative. Simply close the drawer, select 'Post Exposure' on the menu and press Start. When this process is finished, your plate is ready to be trimmed, mounted and used for printing.

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## PLATE PROCESSING

