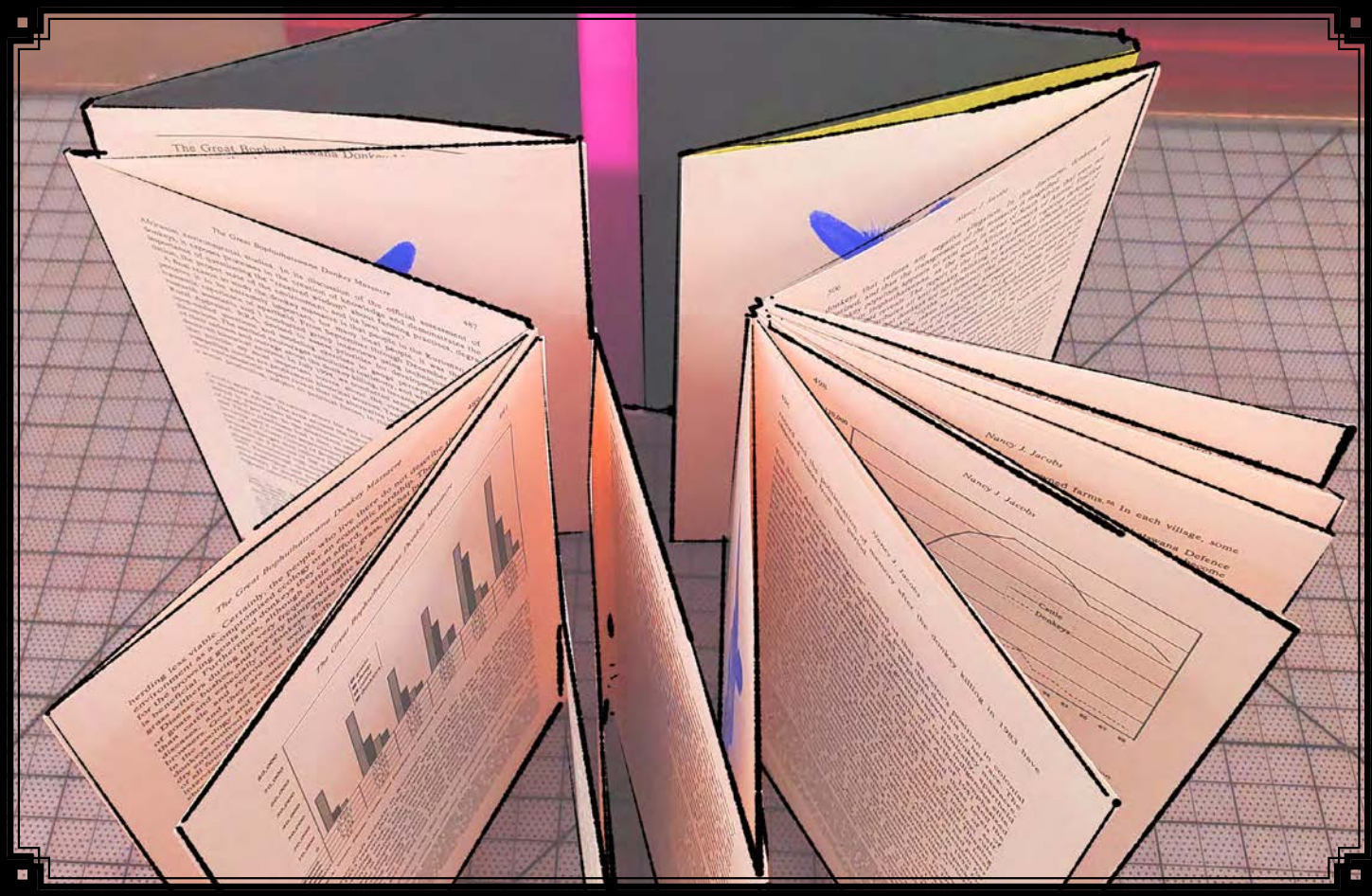


DESIGN LAB BOOKLET SETUP GUIDE VER.22

Welcome to the Design Lab Booklet Setup Guide Ver. 22. Use this document to help you plan, design and eventually print your desired booklet type within our space.

Read through this document in it's entirety, or use the Table of Contents to jump to your desired section.

WWW For more information on the Design Lab, our open hours, and a variety of services we provide, please check out our Resources page by clicking on the icon to the left.

For any questions not answered in our Resources page, please feel free to email us at designlab@newschool.edu.

Keep an eye out for hyperlinks throughout this guide. They're usually icons accompanied by text.

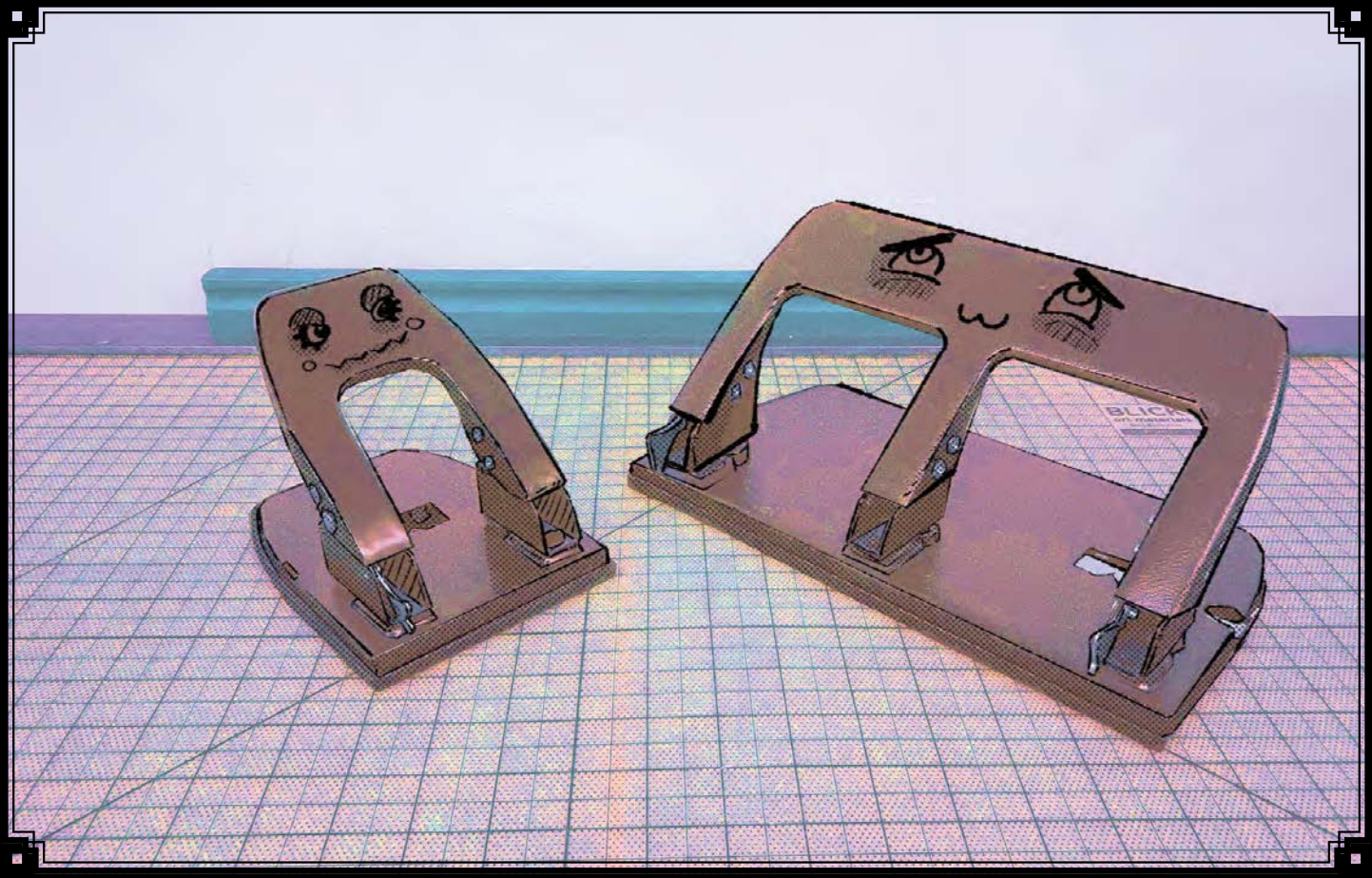
They connect to other pages in the guide or to useful web links.

THE NEW SCHOOL

TABLE OF CONTENTS

Feel free to click on the section you need to view and the Guide will transport you to your selection.

The power of hyperlinks!



SECTION 1: GLOSSARY AND THE IMPORTANCE OF LANGUAGE

To make sure you and our staff are on the same page, we need to be sure we're referring to the same things when communicating. Every industry and field has its own set of jargon, and the Design Lab is no different.

Here are some terms that would benefit you to learn:

Bleed
A printed image that extends beyond one or more of the finished page margins and is later trimmed so that the image "bleeds" off the edge of the sheet. This minimizes the chance that your project will have unwanted white borders on the edges of the page.

Laser vs Inkjet Printers:

Laser Printer
Machine that burns toner powder onto paper to create a print. Great for printing large quantities and double-sided fast and works best with a thinner paperweight.

Inkjet Printer
Machine that sprays droplets of ink onto paper to create a print. Great for printing photos provided that the paper is of suitable quality and thicker paperweights.

Paper Weight
The weight of paper. Also known as grammage. There are two ways of expressing paper weight: Grams per square meter (GSM) and US Pounds (LBS).

Note that the type of paper is very important when looking at the paper using LBS. 70LBS text weight is thinner than 70LBS cover weight.

Text Weight
A paper weight that offers highly aesthetic yet functional papers with a variety of colors, textures, surfaces, and finishes. Text papers can be wood-pulp or cotton content paper.

Bond / Writing Weight
Common type of paper weight often used for letterhead, business forms, writing, typing, and copying.

Cover Weight
Thick, durable paper used for covers of pamphlets, booklets, etc. The most important quality for cover papers is its strength, which must allow it to protect the pages that are bound between it.

Paper Grain
The direction of fibers in a sheet of paper. Paper will tear and fold more easily with the grain and more difficult when against the grain.

RGB vs CMYK:

RGB
A color model used for any type of media that transmits light, such as computer and phone screens. Also known as an additive color model, white is the result of all colors combined.

CMYK
A color model used for any type of physical paper print media. Also known as a subtractive color model, black is the result of all colors combined.

DPI
Dots per inch. The density of dots that can be placed within a line of 1 inch. This results in the measure of the resolution of a screen, scanner, and/or print.

LPI
Lines per inch. is a measurement of printing resolution. A line consists of halftones that are built up by physical ink dots made by the printer device to create different tones. Specifically LPI is a measure of how close together the lines in a halftone grid are.

The risograph machines use LPI to determine print output.

PPI
Pixels per inch (PPI) is the measure of resolution in a digital image or video display. PPI is typically used to refer to the display resolution, or pixel density, of a computer monitor or screen.

Crop Marks
Lines used to indicate the proper trimming of a print. Also known as trim marks.

Registrations Marks
Small designs placed in a non-image area of a print used to determine the correct alignment of colors and/or images. Usually depicted as a circle with a cross.

Vector vs Raster:

Vector
Mathematical system for creating visual images using geometric shapes such as points, lines, curves, and polygons. Often used for fonts, line art, and logos, they can be as high a resolution as the device can output.

Raster
System for depicting a two-dimensional image using a grid of square pixels. Often used for photographic images and paint programs. Not recommended for products that may need to be rendered at multiple resolutions.

Layers in Adobe Suite
A digital overlay used to keep image elements separate for easy editing and manipulation. Aim to create organized, designer-friendly files by incorporating folders and subfolders for your layers when needed.

Color Separation
A means of dividing a full-color image into separate components, corresponding to the color channels desired; typically CMYK. When using the Risograph, separating the color channels is necessary to produce a multi-color print.

Opacity vs Transparency:

Opacity
The extent to which an object will impede the transmission of light through it. An object that allows no light to pass through it is considered to be completely opaque. Can also refer to inks. Opaque inks do not allow light to pass through them and are often used to print solid colors.

Transparency
The extent to which an object will allow light to pass through it. An object that allows all the light to pass through it is considered completely transparent. Can also refer to inks. Transparent inks allow light to pass through them, revealing

the surface underneath.

Opaque vs Transparent vs Translucent:

Opaque
No light can pass through (e.g. Black construction paper).

Translucent
Some light passes through/some detail is visible through the material/object (e.g. vellum).

Transparent
Objects are visible though the material/object (e.g. Clear film/duralar)

Book Block
All the pages and/or signatures of a book that has been folded, gathered and ready for binding. Also known as a text block.

Hard and Soft Covers
A type of paperboard used for binding and covering bound books. Non-flexible paperboard books are known as hardcover or casebound books. Flexible paperboard books are known as softcover books.

Dust Cover
A printed, decorative paper wrapper placed around a book, as a means of protecting the book. Not bound to the book.

Binding Edge
The edge of a printed sheet or book block on which binding is to occur.

Endpapers
A strong paper designed to secure the body of a book (book block/text block) into its case. Also known as an end sheet.

Creep
The extension of the signatures of a book block beyond the edges of the signatures that surround them. A common issue with saddle-stitched books.

Signatures
Any single sheet on which multiple pages have been imposed which, when folded and cut, form a group of pages.

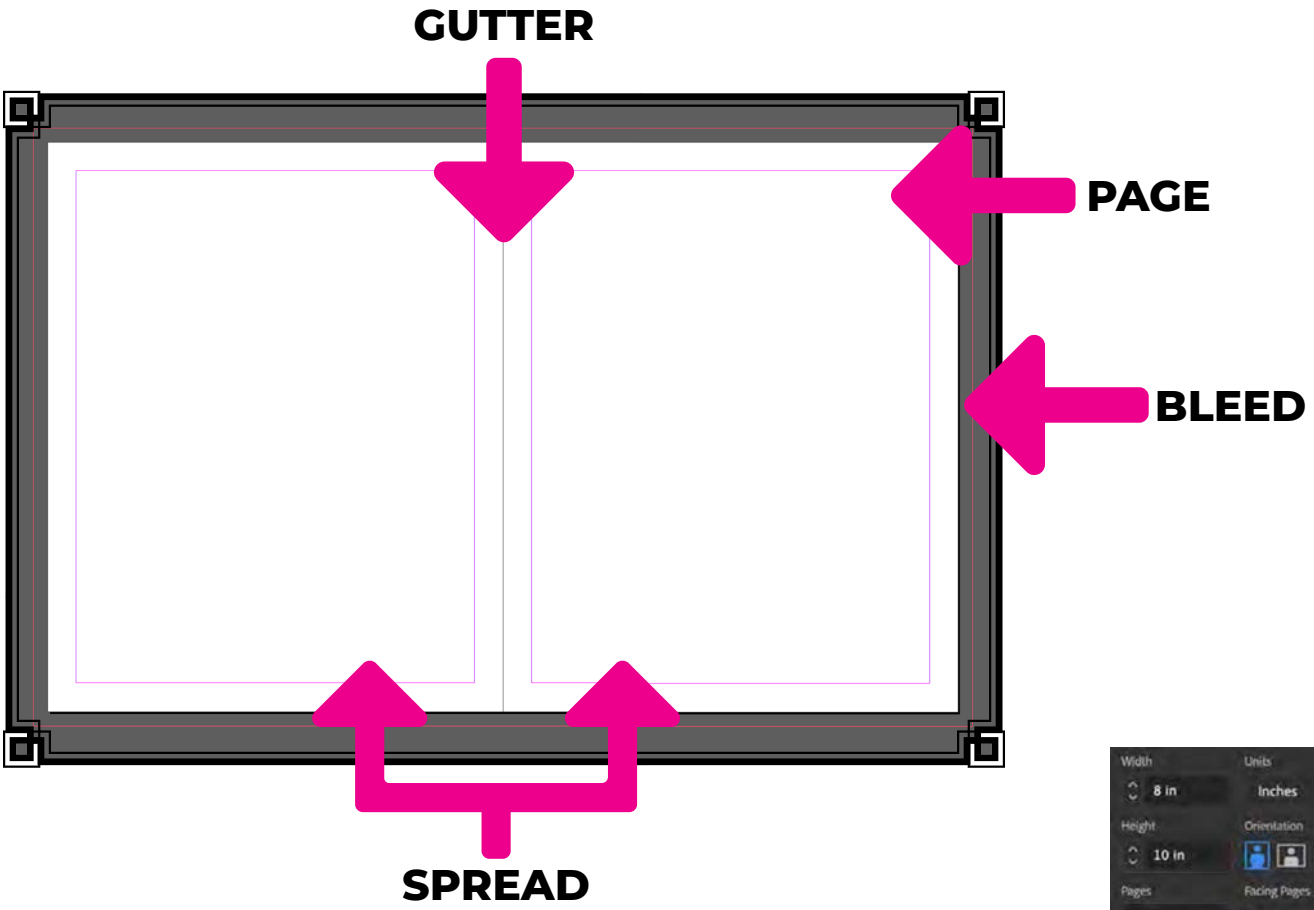
Sheet vs Page vs Spread vs Folio:

Sheet
An individual piece of paper, usually rectangular.
Page
One side of a sheet of paper.

Spread
Any two-facing pages of a book, magazine, newspaper or other publications.
Folio
A sheet of paper folded once, to form 4 pages.

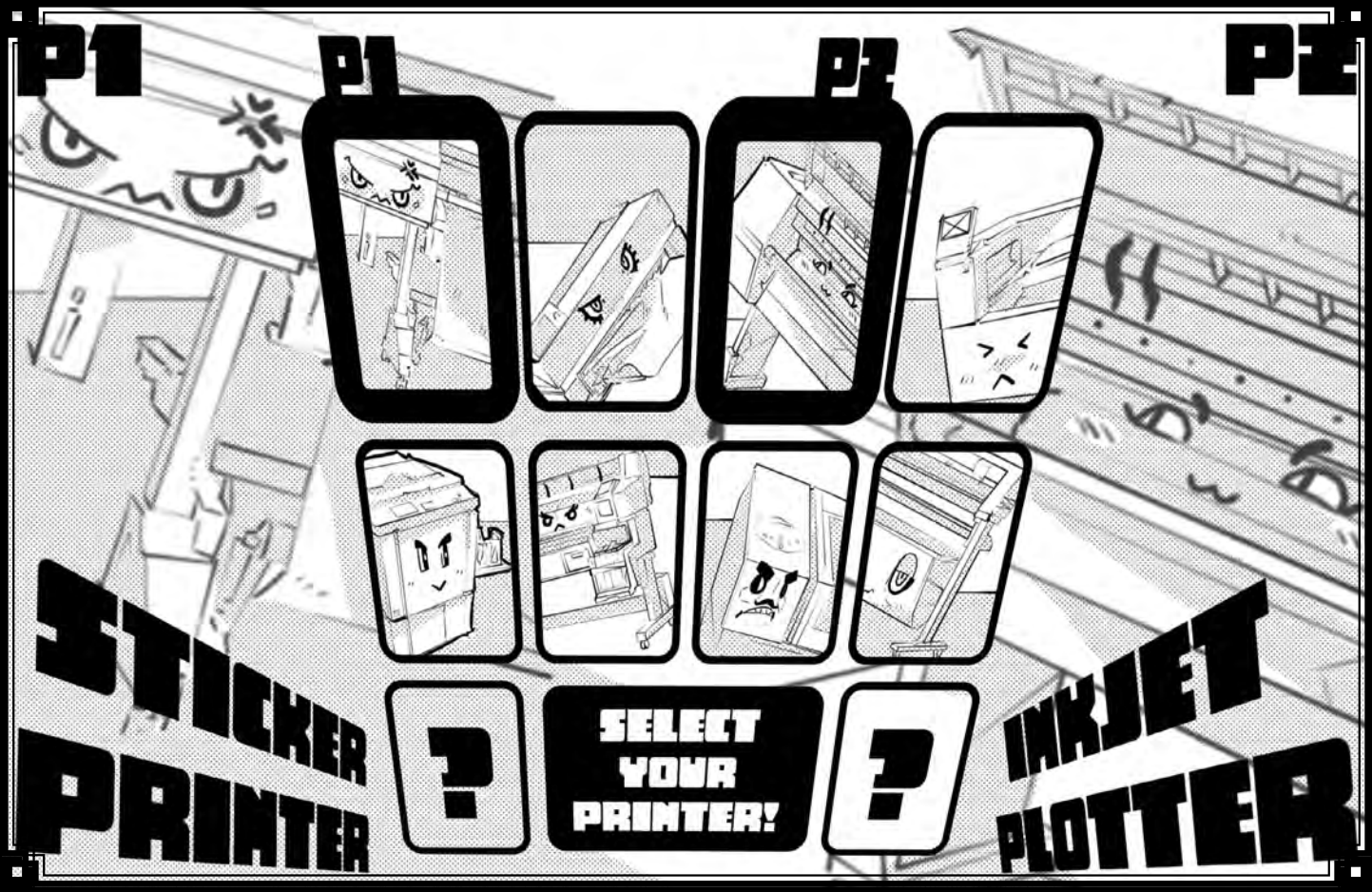
Gutter
In a two-page spread, this is the space between two pages where the pages attach to the spine or other binding.

Below are a set of images for basic document setup as seen on Adobe InDesign. The first image shows a document spread with key vocabulary. Use this as a visual aid to understand key definitions.



These options are shown during the "New Document" Setup window.

"Facing Pages" should always be selected when making booklets.



SECTION 2: PRINTER TYPES

We have a number of machines available for use. Deciding on which one to use for your project requires figuring out what type of booklet you'd like to make and the material you'd like to print on.

Our general-use machines are listed below:

Inkjet
Machine that sprays droplets of ink onto paper to create a print. Great for printing photos, provided that the paper is of suitable quality. Works best with thicker paper weights that can support heavy ink saturation.

Plotter
Wide-format versions of our inkjet printers. Our plotters support a maximum print roll width of 24 and 44 inches.

Laser
Machine that burns toner powder onto paper to create a print. Great for printing double-sided in large volumes quickly. Works best with thinner paper weights.

Printers that require an Orientation
These printers require you to take Orientation before you can use them. You can access these forms by clicking on the icons to the left of each printer types. By taking their respective Orientations once, you will retain access to them throughout your academic career.

Risograph
A high-speed machine used for printing by means of pushing oil-based ink through an internal stencil. Great for printing large volumes quickly. Works best with matte paper surfaces.

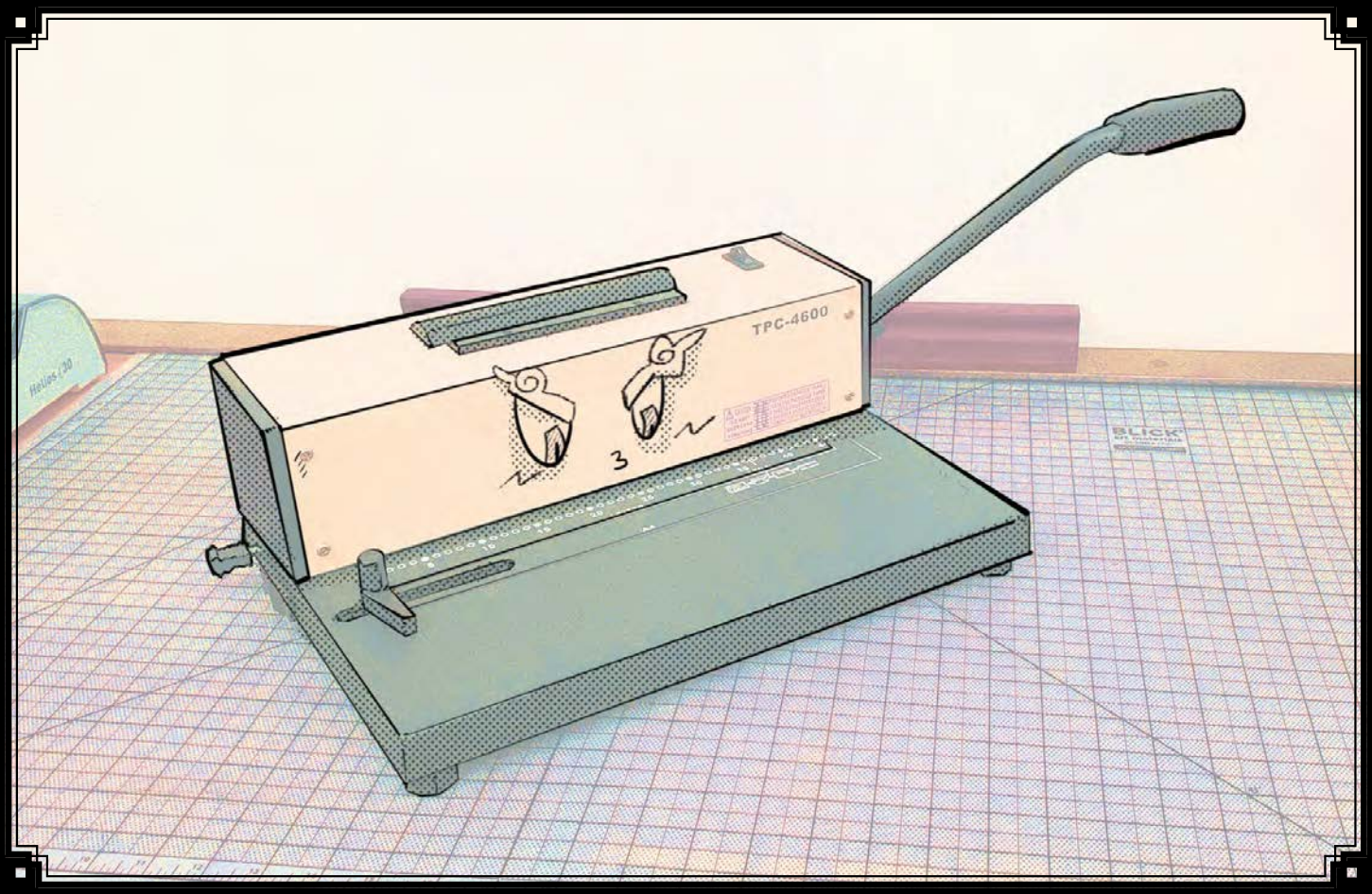
Vinyl Cutter
A machine that uses a blade to cut vinyl material into shapes. Utilizes vector-based files.

Service Printers
These printers are not available for access and instead, files must be provided following their respective submission guides. You can access these forms by clicking on the icons to the left of each printer type. Note that there is a payment fee for each process.

Dye
Printers that disperse dyes onto specific transfer paper. This transfer paper is then used to heat-transfer designs onto suitable substrates.

Sticker
Prints and cuts out vinyl adhesives/labels/stickers. Uses vector shapes to determine where to cut.

UV
Printer that utilizes unique inks which are cured to dry fast with ultraviolet light. Used to print on unconventional three-dimensional substrates such as wood, plastics, etc.



SECTION 3: THE PRINTING PROCESS AND THE IDEAL WORKFLOW

Use the following steps as a rough guide to determine how you should be planning your project and developing your workflow.

Step 1 : Brainstorming your Project
1. What is it about?
2. Is there a precedent for using a particular binding method?
3. Who is your intended audience?

Step 2: Choosing Booklet type / Binding Method
1. How many copies do you plan to produce?
2. How close is your deadline?
3. If you are new to bookbinding, we HIGHLY recommend making a quick mock up on cheap paper. A physical example of your project will help you understand and communicate your design goals to others clearly.

Step 3: File and Folder Set-Up
We recommend creating a folder with your project name and creating subfolders for images and other materials you will link to your document. Be designer-friendly!

Step 4: Saving
File > Package is your friend. See *Section 6: Saving and Moving Files (page 19*).

Step 5: Preparing to visit the Design Lab
Making a Reservation
See *Section 7, Step 1: Making a Reservation (page 22).*

Deciding on a printer and paper to use
See *Section 7, Step 3: Select a Paper Choice (page 22).*

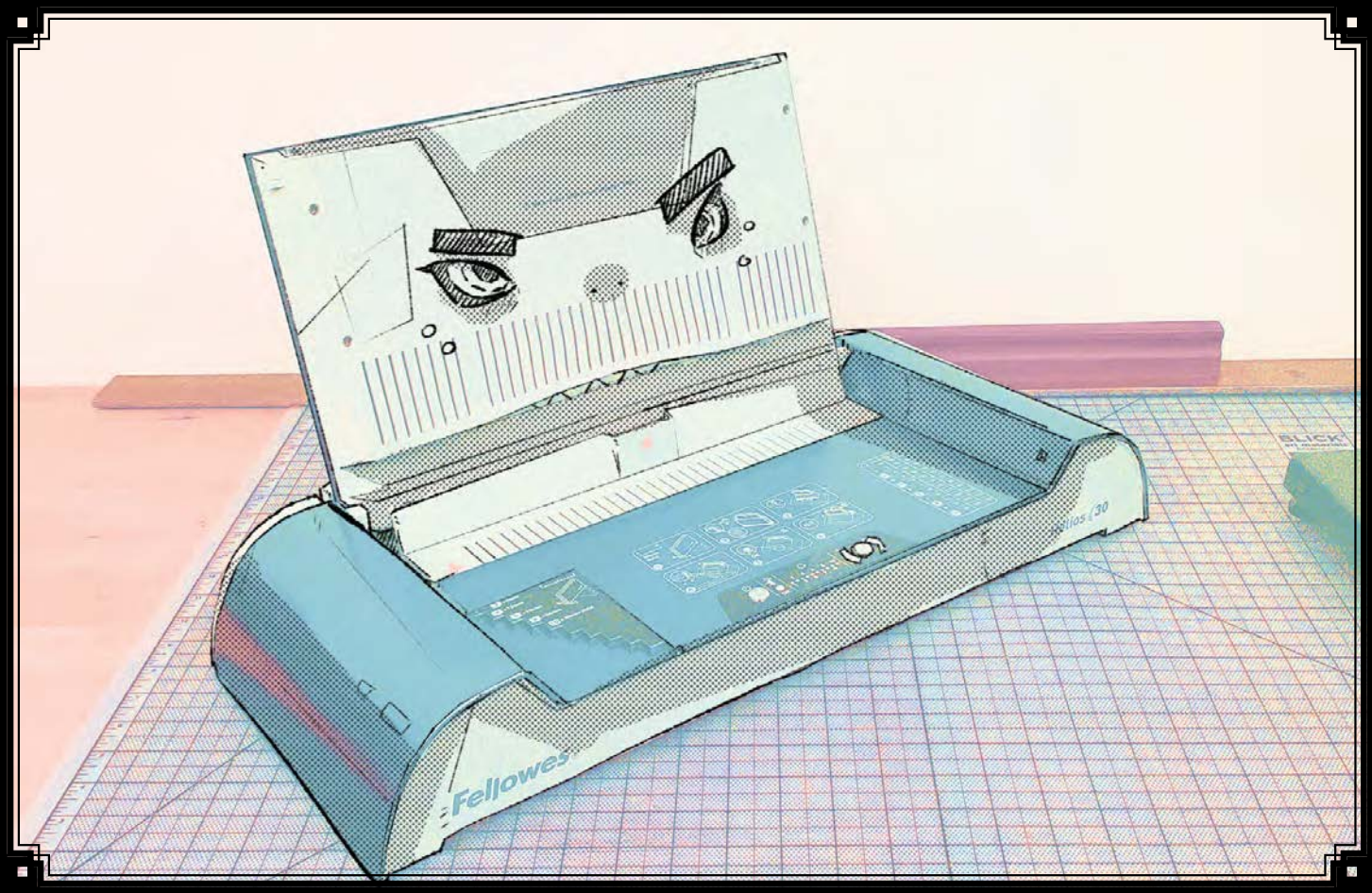
Step 6: Printing
See *Section 7, Step 4: Printing (page 22).*

Step 7: Scoring and Folding
See *Section 7, Step 6: Scoring and Folding (page 23).*

Step 8: Binding
See *Section 7, Step 7: Binding (page 23).*

Step 9: Trimming
See *Section 7, Step 9: Trimming (page 23).*

Step 10: Additional Finishing
See *Section 7, Step 9: Additional Finishing (page 24).*



SECTION 4: WHAT KIND OF PROJECT ARE YOU TRYING TO PRINT?

For each project, there is often a preferred booklet method. Look below for our recommendation of binding methods that would work best with particular project types, and jump to their respective Sections.

Note that some booklet methods will require a Consultation from us so we may best assist you due to their complexity. Email us at *designlab@newschool.edu* or ask the staff at the Tech Desk for more details.

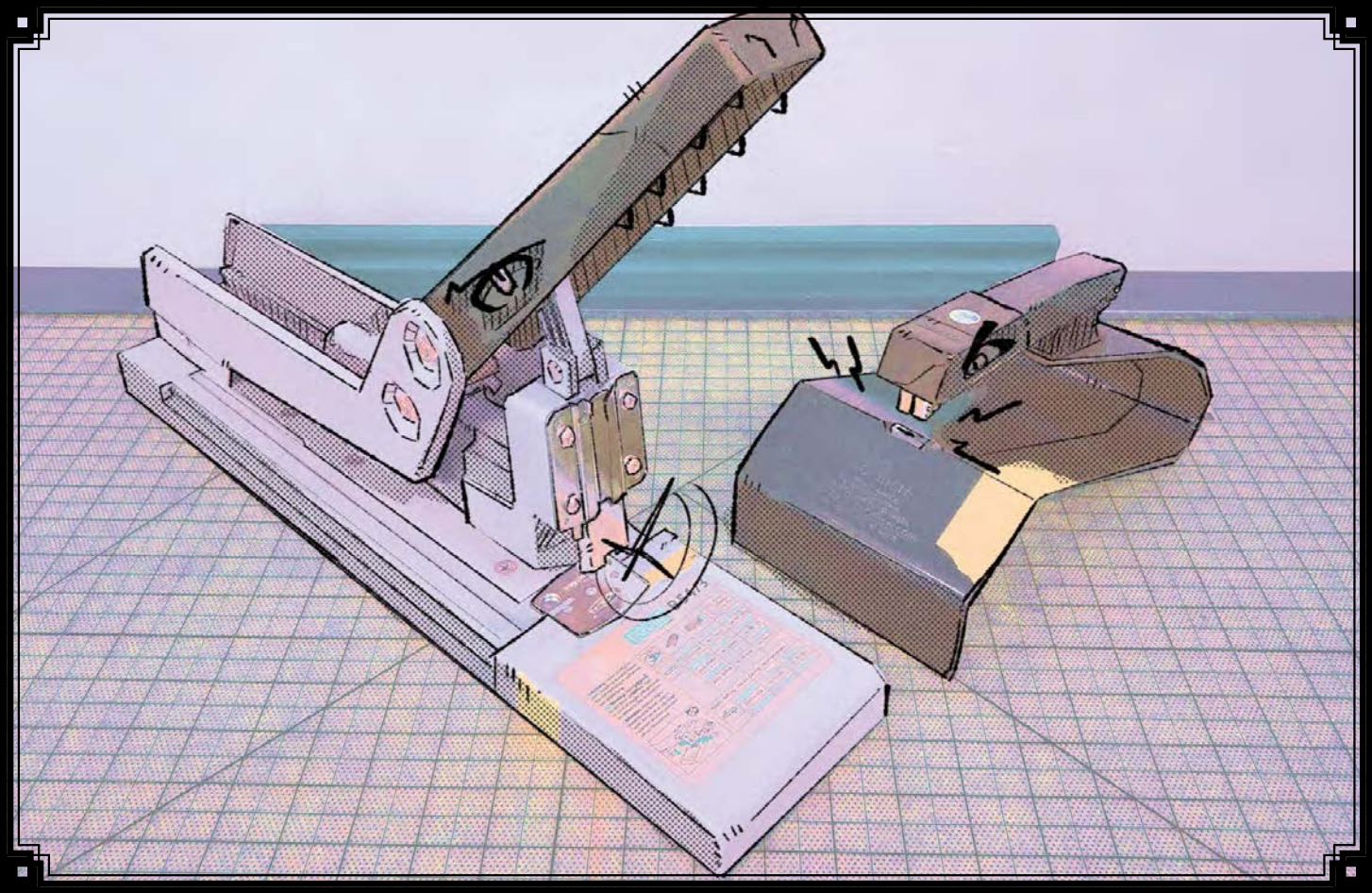
Magazine

Zine

Portfolio

Photo Book

Oversize Paper Binding

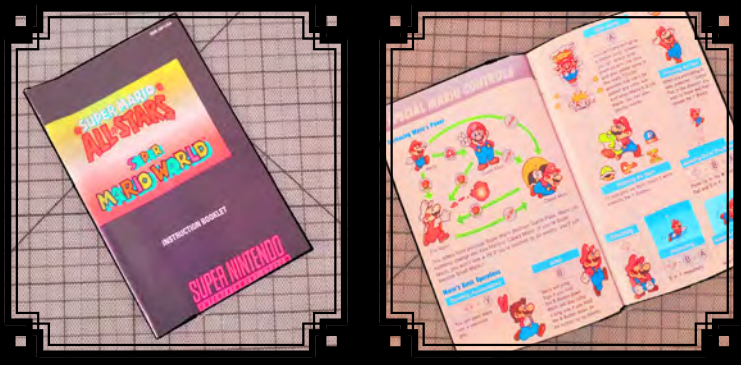


SECTION 5: BOOKLET TYPES

Following is an extensive breakdown of each particular booklet type as well as optimal file setup suggestions, recommended paper types and weight, and illustrations depicting the booklet and binding machine, when necessary.

SADDLE STITCH SINGLE SIGNATURE

Saddle-stitching is a method of binding pages together by driving staples though the centerfold of a signature or group of signatures.



File Setup in Adobe InDesign

1. Facing pages selected
2. Page count
    Maximum page count of 40.
    Final page count must be divisible by 4. Otherwise, blank sheets will be added behind the covers by InDesign's Print Booklet feature.
3. Gutter
    0.25 - 0.5 inches, depending on whether you have images across spreads. Please note, depending on your page count, you may have to account for creep on the center-most pages of your book.

Recommended paper weight for printing

Text/Bond/Writing for book block
Cover for cover

How it's printed

Double-sided. Page Position-Centered.
Four pages per one sheet of paper.

How it's bound

1. Fold each sheet in the middle.
2. Align the entire signature and staple through the centerfold. Two to three staples will suffice.
3. Trim each edge except the binding edge.

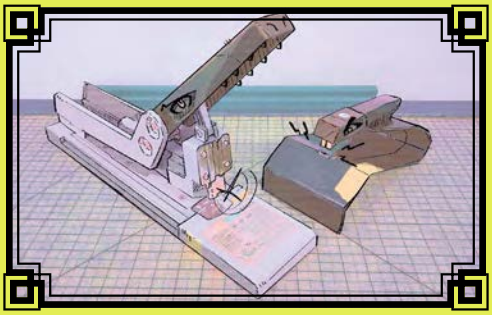
Does it lie/open flat?

Yes

What projects it's usually used for

Magazines, Zines

Printed book block



Heavy duty long arm and booklet stapler used for binding.

SPIRAL / COMB / WIRE BINDING

A method of binding in which pages are bound together by means of a wire or plastic coil threaded into drilled or punched holes along the binding edge of the pages.

File Setup in Adobe InDesign
1. Facing pages selected.
2 Page count
    Maximum page count of 200.
    Final page count must be divisible by 2.
3. Gutter
    0.25 to 0.5 inch gutter recommended.

Recommended paper weight for printing
Text/Bond/Writing weight for book block.
Cover for cover.

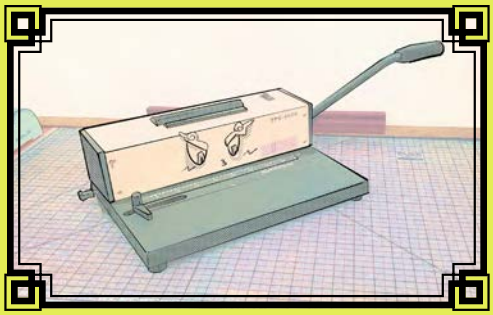
How it's printed
Double-sided. Page Position-Centered.
Two pages per one sheet of paper.

How it's bound
1. Trim all four edges on book block
2. Use Spiral/Coil/Wire machine to punch holes through the binding edges.
3. If Spiral binding, spool the spiral through the holes and trim excess spiral material.
4. If Coil/Wire binding, use machine to align Coil/Wire to binding edge holes, then install.

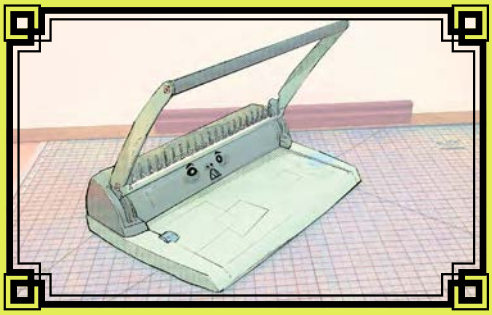
Does it lie/open flat?
Yes

What projects it's usually used for
Magazines
Zines
Photo Books
Portfolios

Printed book block



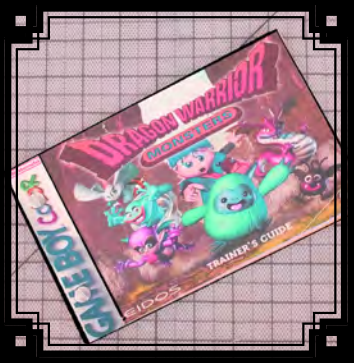
Spiral paper punching machine



Comb paper puncher and binding machine.

SCREW / FASTENER BINDING

A method of binding in which pages are bound together by means of a screw or metal fastener



File Setup in Adobe InDesign

1. Facing pages selected.
2. Page count
   - Maximum page count of 200.
   - Final page count must be divisible by 2.
3. Gutter
   - The thickness of your binding margin will affect your gutter. On odd-numbered pages, your binding margin is on the left of your page. On even-numbered pages, your binding margin is on the right of your page.

Recommended paper weight

Text/Bond/Writing for book block.
Cover for cover.

How it's printed

Double-sided. Page Position Centered.
Two pages per one sheet of paper.

How it's bound

1. Trim all four edges on book block.
2. Use hole punchers to punch holes on binding edge of book block. Two holes for fastener binding, and two-three holes for screw binding.
3. For fastener binding, slip fastener through and close with clasp.
4. For screw binding, tighten screws to posts.

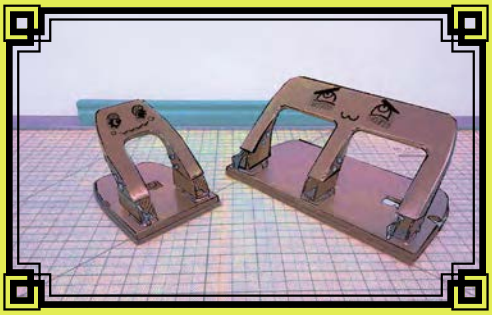
Does it lie/open flat?

No

What projects it's usually used for

Magazines, Zines, Photo Books, Portfolios

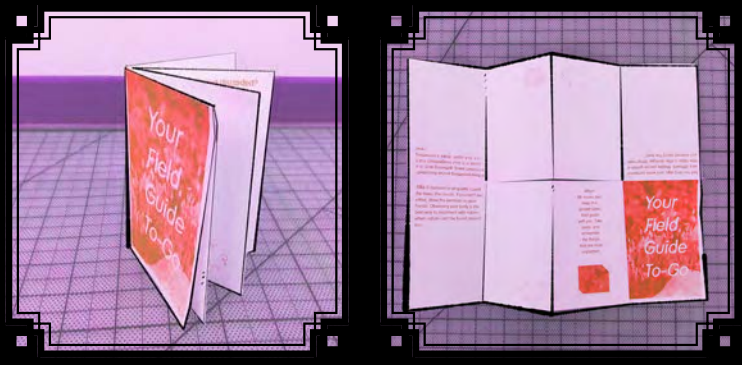
Printed book block



Paper hole-punching machines

8-FOLD

A booklet made up of one sheet of paper on which, when folded and given a single cut, produces 8 pages.



File Setup in Adobe InDesign
1. Page count
    a. 1 page (one sheet of paper, folded)
2. Gutter
    a. No gutter needed.

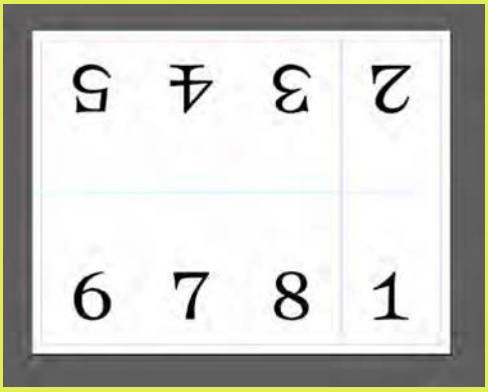
Recommended paper weight
Text/Bond/Writing.

How it's printed
Double-sided (optional). Page Position Centered.

How it's bound
1. Set up a document with two rows and four columns (See diagram on left).
2. Print as a single sheet.
3. Alternate vertical folds between pages, and fold through horizontal centerfold.
4. Cut horizontal centerfold line between pages 7 and 8.

Does it lie/open flat?
Yes

What projects it's usually used for
Zines



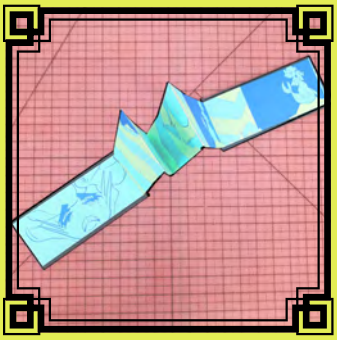
Example of document layout. Note that pages 2, 3, 4 and 5 must be upside down for proper results.

ADVANCED BINDING METHODS

Due to their complex file setup and binding structure, a consultation is required for us to explain the production process for these methods.

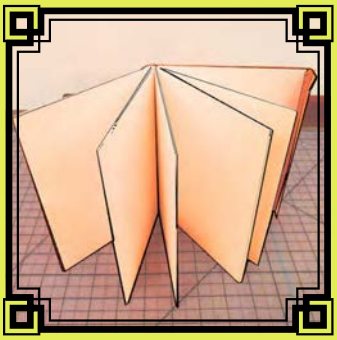
Click the icon above to fill out a Consultation form.

Accordion (Consultation REQUIRED)
A binding method consisting of two or more parallel folds, with adjacent folds in opposite directions such that the folds open and close much like the bellows of an accordion.

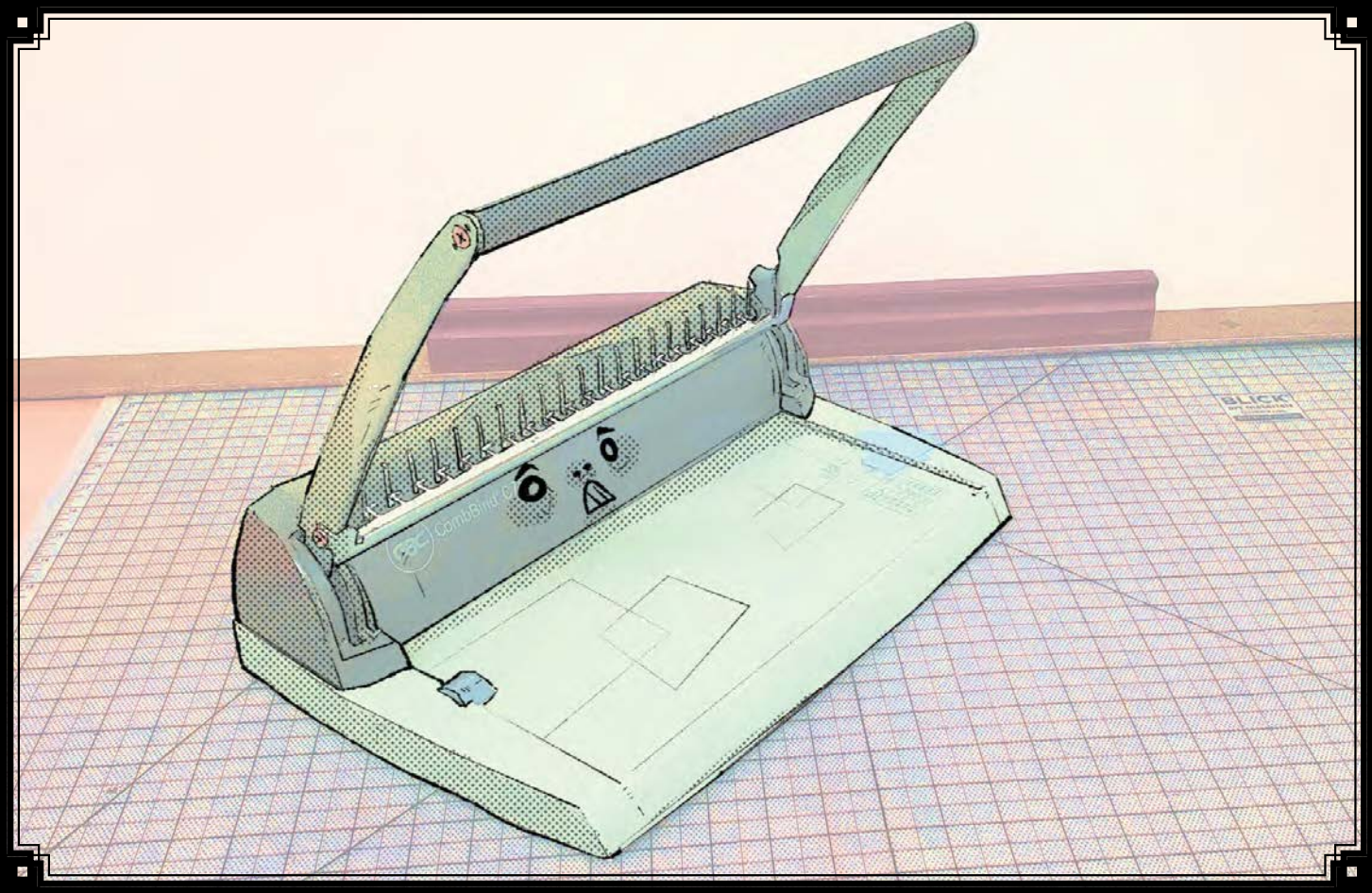


Hard Cover (Consultation REQUIRED)
A method of binding the book block to cloth covered cardboard covers. This process is also known as “casing in.”

Drumleaf (Consultation REQUIRED)
A binding method that allows for full page spreads, a book that opens flat, and no stitching through the center folds.



French Fold (Consultation REQUIRED)
A binding method where you fold sections back on themselves, and then bind the two open edges, usually to a soft cover.



SECTION 6: SAVING AND MOVING FILES

One of the most common issues that plague students is having difficulty successfully transferring and opening files to our computer workspaces for printing. Whether font issues or missing images, here are a few things to keep in mind when saving your file.

File formats
.indd, .idml, and.pdf formats.

Packaging in InDesign

Adobe Typefaces
Adobe Fonts can be a bit buggy, even when files are packaged. Because of this, we recommend outlining your type (Type > Create Outline). Note that you will be unable to edit your text afterward.

Check your Links Panel
Before Packaging, check the Links panel to see if there are any missing link images.

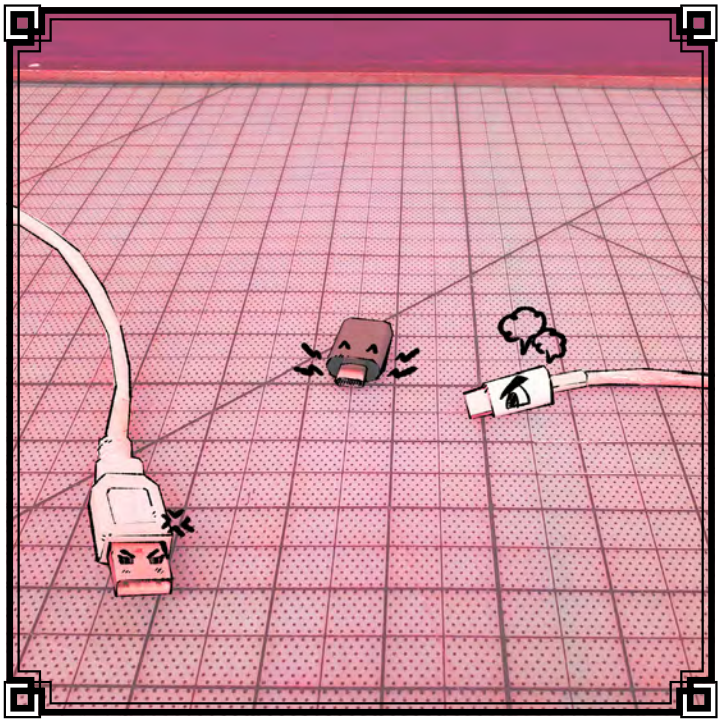
Overset Text errors are okay if you are aware of them.
Make sure you select “Include Fonts and Links From Hidden and Non-Printing Content” in the “Create Package Folder” window.

Emailing / Cloud Storage

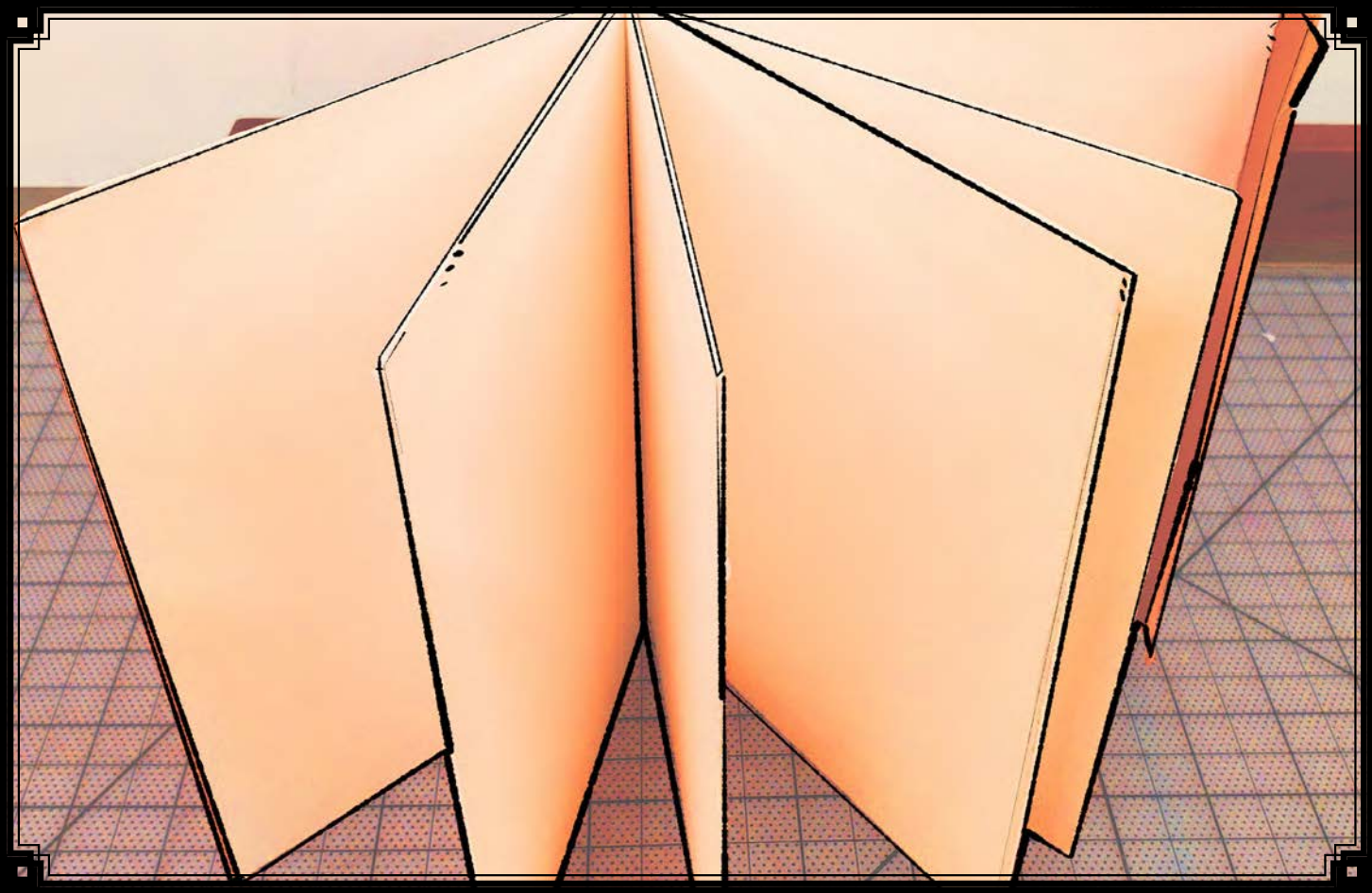
DO NOT use Adobe Cloud Storage. We recommend creating a project folder within your Google Drive, uploading your necessary documents to that folder, and then downloading that entire folder to our iMacs. This ensures that if your file was packaged, all necessary linked files are contained in one place.

Clip / Hard Drive

USB-C connections preferred. Our iMacs are all the latest models, which unfortunately only accept USB-C connectors. We do, however, have USB 3.0 to USB-C converters available for use.



From left to right: USB cable, USB 3.0 to USB-C Adapter, and USB-C cable.



SECTION 7: IN THE DESIGN LAB

You know what kind of booklet to make, your file is properly formatted and packaged, and you're ready to print. What do you next?

Step 1: Make a Reservation
There are three ways of requesting to use a printer in the Design Lab:

Online Reservation
Fill out our Printer Reservation Form in our Resources Page using the icon to the left. We will respond to your request via email.

In-Person Reservation
Visit the Tech Desk and ask any Design Lab Staff to make a future reservation.

Walk-in (No Reservation)
Visit the Tech Desk and ask if there's a particular printer type available at the moment. May require you to sign up on our Waitlist.

You are always welcome to Walk-in and request if a printer is available, and we will do our best to give you a printing station. However, you may have to join our Waitlist, which does not guarantee that you will receive a printer. This is especially true during Midterms and Finals. *We highly recommend making reservations in advance whenever possible.*

Step 2: Claiming your Printer
You've either made a reservation, or have put your name on the Waitlist. Depending on which one you've done....

Claiming a printer you have reserved

1. Let any staff at the Tech Desk know that you have arrived for your reservation and they'll help you get set up.
2. Present your New School ID for the staff to hold on to.
3. Remember that a Reservation will be forfeited if you arrive 15 minutes after the start of reservation time.

Claiming a printer you signed up for on the Waitlist

1. Wait for your name to be called out in the Common area of the Design Lab
2. When called, let a staff at the Tech Desk know you are here.
3. Present your New School ID for staff to hold on to.
4. Wait for further instructions.

Step 3: Select a Paper Choice
Most likely, your decision on what kind of paper you'd like your booklet to be printed on will influence what printer type you should ask for.

Laser
Thinner papers work best, no heavier than Text/Bond/Writing weight.

Inkjet
Thicker papers, such as Cover weight, work best. For best results, use inkjet compatible papers.

Inkjet Plotters
Thicker paper sheets sized 11 x 17 inches and larger. We also have roll paper for sale.

Riso
Both thin and thicker papers suitable. Matte paper only.

Click the icon to the left to access our Paper Store and check out our selection available for purchase.

Step 4: Printing

1. Feel free to ask any staff at the Tech Desk for help with making sure you're feeding paper into the printer correctly.
2. Ask any staff for help with the Print dialog menu, especially when using InDesign's "Print Booklet" dialog menu.
3. Bring extra paper and assume that errors and mistakes will occur.

4. Make extra copies just in case. You might make mistakes during trimming.

Step 5: Post-Print Tools

You've finished printing your document, but unfortunately, the hard work now begins. You will most likely need a number of tools. Please ask any staff at the Tech Desk and be prepared to have them hold your ID.

Below is a non-exhaustive list of some of the tools we offer for rent:

Binding Machines

1. Perfect Binding Machine
2. Spiral/ Comb/Wire Paper Puncher

General tools List

1. Bone Folder
2. Tape
3. PVA
4. Glue brushes
5. Rulers
6. Olfa/ Exacto blades
7. Needles and Thread
8. Booklet Stapler

Step 6: Scoring and Folding

Fold each page one at a time for best results, especially if you're new to the process. Patience is key! Use a bone folder, and fold with the paper grain when possible. (See Section 2 for grain definition)

Step 7: Binding

Please refer to Section 7 for more information on binding your desired booklet type:

Perfect Bound
Saddle Stitch (Single Signature)
Spiral / Comb / Wire Binding
Screw / Fastener Binding
8-Fold

Please note that some binding methods, particularly Perfect Bound, require you to trim at least once before binding, and then again after binding.

Step 8: Trimming

There are a number of methods available for trimming your booklet. From most efficient to least:

Electric Book Trimmer

Easiest, safest and cleanest cuts possible. Click the icon to the left to view our Instructional Video.

Paper Guillotine

Simple, but limited to a set number of pages.

RotaTrim
1-2 sheets at a time, beginner friendly but time-consuming.

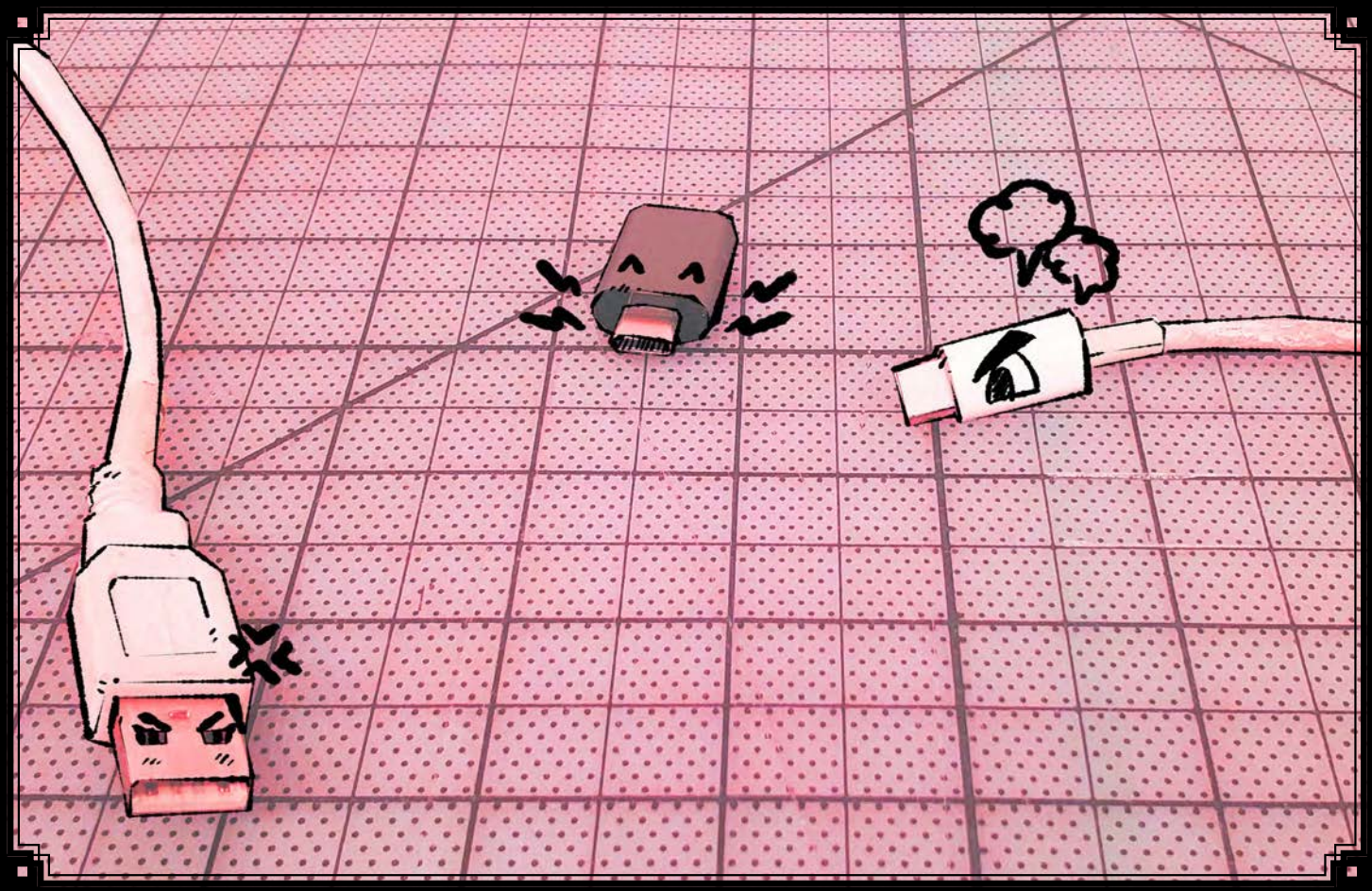
Ruler and Olfa Knife
Minimal tools, 1 sheet per cut, time-consuming and tedious.

Whenever possible, we recommend trimming after binding to minimize creep. And always measure twice, cut once.

Step 9: Additional Finishing
Depending on your project and time available, you may opt to do some additional finishings to your project. Here are some common options:

Dust covers
These can be printed on cover stock paper and transparencies if desired.

Rounded corners
We have a single-sheet corner rounder available for rental. Ask our staff for more information.

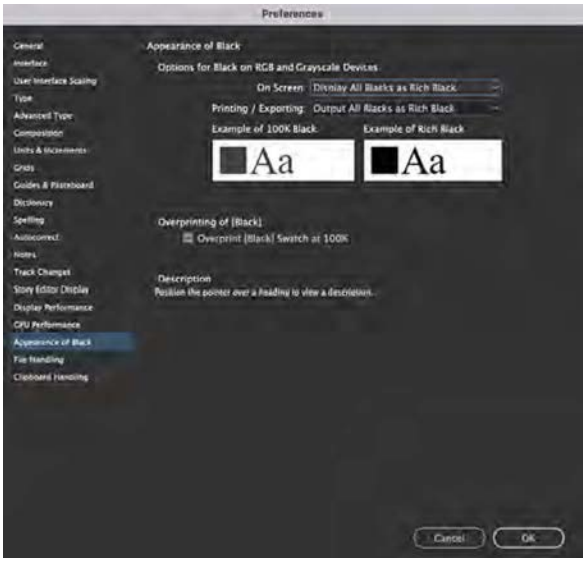


SECTION 8: FAQ AND ISSUES

While not extensive, below is a list of common issues that you may encounter throughout your booklet making process. While we hope some of the answers will aid you, the best solution to most of these issues is to give yourself ample time to learn and make mistakes.

Q: The black area in my prints are grey. What's going on?

A: In InDesign, use Registration Black and activate "Rich Black" settings in Preferences for the darkest black possible, especially when using a laser printer. See the diagram to the right for details:



Q: I see streaks in my prints. What's going on?

A: Banding is a defect in printing that usually appears as horizontal lines and or streaks. If you see this on your inkjet prints, ask a staff member for a nozzle check. The printer heads may be clogged, and this usually will resolve the issue. If you see this on your laser prints, ask a staff member to check the machine.

Q: My print is faded. What's going on?

A: For inkjet prints, check to see if your printing settings are accurate to the paper type that you are using. Ask a staff member for assistance if needed. For riso prints, remember that there are natural imperfections in the riso printing process. Try to create a new master if possible.

Q; My USB or hard drive does not read on the computer. What's going on?

A: Check to see if your drive is formatted to be read on Mac OS or Window PC's. Mac OS use HFS formats, while Window PC's generally use NTFS by default. Formatting your drives to the exFAT file system will allow your drives to work on both systems. Note that if you do this on a drive with existing data, YOU WILL LOOSE ALL YOUR DATA.

Q: Adobe software is asking me to log in. What's going on?

A: On all of our print stations, you will have to log in to your own Adobe account using your New School account. Remember to log yourself out when done!

Q: Can I use bristol paper to print?

A: Technically, yes, but your prints will not look good. Remember this rule: The cheaper the paper, the worse the print.

Q: Can I print on newsprint?

A: No. We do, however, carry a limited selection of newsprint alternatives you can purchase from our store to use.

Q: The color of my prints do not match the screen. What's going on?

A: For inkjet prints in particular, make sure you're setting the correct printer settings and/or ICC profiles to your selected paper. Ask a staff for assistance if needed. Note that screens use the RGB color mode to display their colors, while paper prints use the CMYK color mode. Keep this in mind when setting up your documents in the beginning.

Lastly, if you choose to print on a natural or colored paper, your print colors will appear drastically different.

Q: How can I print on black paper? Will the white sections in my file print?

A. Our laser and inkjet printers will not print white. Any portion of your work that has white will be seen as transparent by these printers. Any gray sections in your work will be printed with black ink. Risograph printing is a great solution for printing on black paper, and UV Printing as a Service Job may be an option available as well. Ask our staff for more information.

Q: Where should I go to buy paper and other materials?

City Papery
Text-Cover Stock Paper | Colored Papers | Specialty Papers | Inkjet printable Film | Laser Printable Film | High Quality Inkjet Paper | Binding Supplies | Stationary
23 W 18th St, New York, NY 10011

Staples
Cheap Stacks of Paper | Text-Cover Stock Paper | Colored Papers | Heat Transfer Inkjet Sheets | Stationery
5 Union Square W, New York, NY 10003

Adorama
High Quality Inkjet Paper
42 W 18th St, New York, NY 10011

Blick
Large Sheets of Paper | Drawing & Craft Paper | Tracing Paper | Book Binding Supplies
111 4th Ave, New York, NY 10003

Paper Hood
Printable Heat Transfer Sheets | Adhesive Vinyl | Heat Transfer Vinyl | Heat Transfer Fabrics
38 W 32nd St #905, New York, NY 10001

Michael's
Printable Heat Transfer Sheets | Adhesive vinyl | Heat Transfer Vinyl
675 6th Ave, New York, NY 10010

Canal Plastics
Adhesive vinyl | Plastics
345 Canal St, New York, NY 10013 Where to go to outsource print services

Talas
Book Binding Supplies | Large Sheets of Paper | Colored Papers
330 Morgan Ave, Brooklyn, NY 11211