

Bookmaking Workshop
May 22, 2010

Instructions for Basic Non-Adhesive Book
—with Accordion & Sewn-signature Options—

This handout is a much-expanded adaptation of Gabrielle Fox's "Non-Adhesive Accordion Book," *The Essential Guide to Making Handmade Books* (Cincinnati, OH: North Light Books, 2000), pp. 22-34. The illustrations were prepared for this handout.

Materials and Tools

The materials list is for two versions: with accordion body and with sewn-pages body.



Materials for accordion book (usually enough for two books)

- One sheet of Canson, Crescent, or similar paper: approximately 22x32"; 80 lb (170 gsm)
- decorative paper with at least the weight of good-quality stationery, such as marbled papers (Papers such as Lama Li, Washi, or similar Japanese papers are too light.)
- light-weight board, no thicker than 1/8 inch

Materials list for sewn-signature book

- half or quarter sheet of Canson, Crescent, or similar paper, 80 lbs (170 gsm)
- good-quality text paper: Use either a single pamphlet signature or several thinner signatures sewn together. For example, a single-signature of 8 pages, folded (16 pages total); if thicker paper, use fewer pages; if thinner paper, use more pages; or several signatures of two or three pages each sewn together.
- binding thread
- decorative paper, and light-weight board, as above.

Tools

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| bone folder | <i>for sewn version</i> |
| Xacto knife or similar | needle and binding thread |
| heavy craft knife (utility cutter) | awl |
| scissors | |
| metal ruler (preferably with cork on bottom) | <i>additional tools, if available</i> |
| sharpened pencil/mechanical pencil | cutting mat |

Parts of the book structure

The book consists of five separate parts: (a) body of the book; either an accordion body or pages folded into signatures and sewn, (b) cover boards, (c) inside covers, (d) outside covers, and (e) spine cover.

In the basic accordion version, the book is held together by its own structure, without any adhesives or other attaching features. In the signatures version, the pages are held together by thread but the structure is not glued.

The instructions here are for three versions: the accordion version and sewn variations:
with basic accordion body pages 2-4
with sewn pamphlet body pages 4-5
with sewn signatures body pages 5-6

Instructions for Basic Non-Adhesive Book with Accordion Body

I. Make the book components

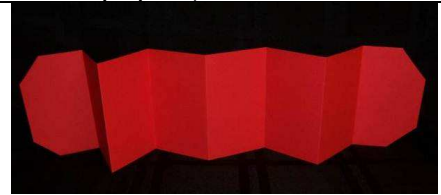
A. Body of the book

1. Determine the grain of the large sheet that will be used for the body of the book. The accordion should be folded *with* the grain (i.e., the grain runs along the spine).
2. Decide the height wanted for the book; mark off that height across the paper and cut a strip across the whole sheet. That strip will become the body of the book. (For example, for a book 6 inches tall, cut a strip that is 6 inches high and the width of the paper.)

3. Fold the strip into a standard 8-part accordion.
See detailed instructions in VABC handout on accordion books.

4. Trim the end panels of the accordion:
 - trim off one-third of the width of each end panel
 - clip each corner diagonally (appr. ½")

Note: *From this point on, all measurements are based on the size of the folded accordion.*

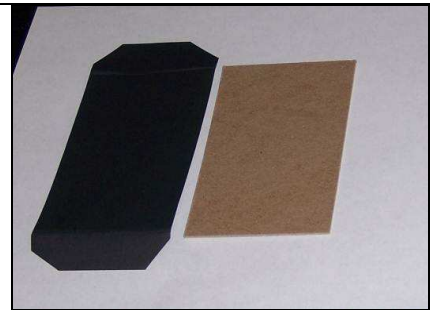


B. Cover boards

Cut two covers that are the same size as the folded accordion body. (For example, if the folded accordion is 6" tall by 4" wide, cut cover boards that are 6" tall by 4" wide.)

C. Inside cover papers

1. Cut two inside cover papers that are the same width as the cover boards but 1 inch longer at the top and at the bottom (that is, 2 inches total longer than the board.)
2. Center a cover board on the inside cover paper, score the paper along the top edge of the board, and fold it over board, creasing and smoothing all edges with a bone folder. Do the same with the bottom edge.
3. Repeat with the second cover board.

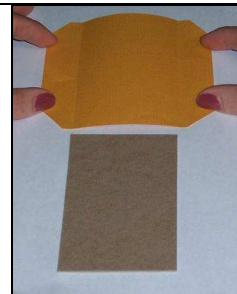


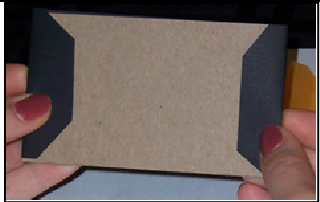
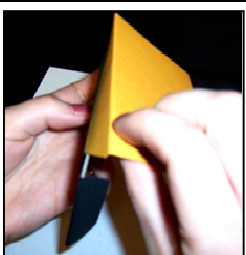
4. At the end of this process, there will be two cover boards, each with a fitted inside cover paper.

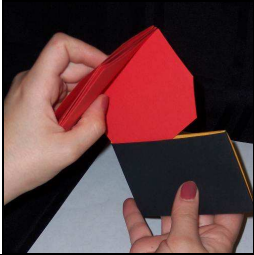

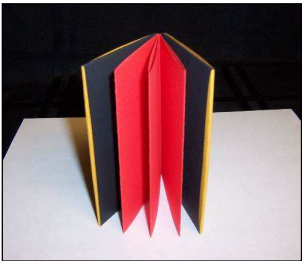
5. Remove the boards from the folded inside cover papers. Clip the corners of the cover papers (approx. ½-inch).

D. Outside cover papers

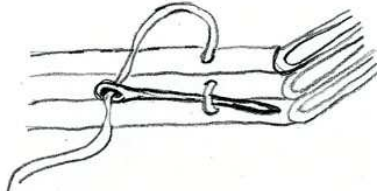

1. Cut two outside cover papers that are the same height as the cover boards but 1 inch wider on each side (that is, 2 inches total wider than the board).
2. Center a cover board on the outside cover paper, score along one side of the board, and fold it over the board, creasing and smoothing all edges with a bone folder. Do the same with the other side.
3. Repeat with the second cover board.



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| E. Spine cover | |
| <i>Note:</i> These instructions seem complicated because of the detail involved, but the process is straightforward: you need to cut a spine cover and then mark the fold lines so that you can fold the cover to fit over the spine. | |
| 1. Cut a spine that is the height of the cover boards and 2 inches wide. | |
| 2. Measure the width of the accordion's spine. Hold the spine of the folded accordion closed, not too tightly or too loosely—what seems the “natural” width of the accordion. <i>Note:</i> The clipped edges are the front; the back edges are the spine. | |
| 3. Measure the width of the spine paper and mark the center at the top and bottom of the paper. | |
| 4. Mark the width of the accordion's spine at the top and bottom so that it is centered on the center mark you've already made. (For example, if the spine is ¼ -inch wide, the marks would be 1/8-inch on each side of the center marks at top and bottom of the of the spine cover.) | |
| 5. Using a bone folder, score the two folds that create the spine fold. These folds are the lines connecting the two sets of marks just added. (For the example above, score along the line that is 1/8 inch to the <i>right</i> of the center marks and score again along the line that is 1/8 inch to the <i>left</i> of the center marks.) | |
| 6. Crease these scored lines against a straight edge; then lay the paper flat and crease each fold firmly, smoothing with a bone folder. | |
| 7. Clip the corners (approx. ½ inch). | |
| 8. At the end of this process, the spine cover will have a straight, square-edged end and two “wings” with clipped corners. | |
| II. Assemble the book | |
| A. Collect the components of the book | |
| Collect the accordion body, two cover boards, two inside cover-papers, two outside cover-papers, and the spine cover. | |
| B. Assemble the covers | |
| 1. Take one cover board, wrap the inside cover papers over the top and bottom. |  |
| 2. Wrap the outside cover paper around the uncovered side and tuck the ends between the board and the inside cover papers. |  |
| 3. When finished, both sides are covered and all ends are tucked out of sight. | |

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| <p>C. Insert accordion into covers</p> <p>1. Insert one end of the accordion between the cover board and the inside cover paper—that is, slide it into the inside edge of the cover.</p> |  |
| <p>2. Repeat with the other end.</p> | |
| <p>3. If the accordion is slightly too tall to fit; trim off the smallest amount possible to allow the end to fit snugly into the cover.</p> | |
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| <p>D. Insert the spine</p> | |
| <p>1. Hold the book with the spine end facing you.</p> |  |
| <p>2. Insert the spine cover, pushing each side into the space between the cover board and the inside cover paper, adjusting it to fit straight and snugly.</p> | |
| <p>3. If the spine cover is slightly too tall, trim off the smallest amount possible to allow it to fit snugly into the covers.</p> | |
|  | <p><i>Note:</i> The spine cover can be fitted into either “end” of the book, but putting it on the “back” exposes the inside cover papers.</p> |
| <p>Instructions for book body with sewn pages</p> | |
| <p>I. Using pamphlet-sewn pages</p> | |
| <p>A. Create pages for the book body</p> | |
| <p>1. Decide the desired size of the folded pages. For example, the folded pages might be 6 inches high and 4 inches wide.</p> | |
| <p>2. Determine the grain of the text paper. The grain of the paper should be along the height of the book.</p> | |
| <p>3. Cut paper that is the height of the book and twice the chosen width.</p> | |
| <p>4. Fold each sheet in half, smoothing the crease with a bone folder. If using thicker paper, measure the center, score with bone folder, and use bone folder to fold paper against a straightedge and to crease the sheet.</p> | |
| <p>5. Assemble the sheets into one signature.</p> | |
| <p>6. Cut a piece of cardstock or heavy paper the same size as the page paper; fold in half, smoothing with bone folder; trim off about 1/3 of the width of each folded page; clip the corners (approx. ½ inch).</p> | |

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| 7. Nest the pages into the cardstock cover. |
| <i>Note:</i> Once nested together, the fore-edges of the pamphlet will not be flush. If you want them to be flush, trim the whole pamphlet on a board shear. (If that is not feasible, you can trim each sheet slightly to create a flush edge—but this requires a good eye and careful attention to how much to trim from each sheet.) |
| B. Sew the pamphlet |
| 1. Mark and punch holes for sewing the pamphlet: —on the top-most sheet, mark three sites for punching holes: in the center and ½-1 inch from each end —using an awl, punch hole at each site <i>Tip:</i> Use an open phone book as a base for punching the holes. (Place the pamphlet into the fold of the book, facing up, and punch the holes through the paper and into the book.) |
| 2. Sew the pamphlet together with waxed binding thread: <ul style="list-style-type: none"> - cut a piece of thread 2-½ to 3 times as long as the height of the book - make the first stitch from outside to inside through the top hole, leaving a 3-4" tail. - sew through the center hole from inside to outside; then into the bottom hole from outside; then out the center hole toward the outside - tie the end of the thread to the tail, tightening the tension and using a square knot. trim the ends to 1/8" |
| C. Make other book components and assemble |
| Make the other book components and assemble the book, as described in instructions above for the accordion version (pp. 2-4). |
| II. Using sewn-signatures pages |
| A. Create pages for the body |
| 1. Follow instructions for sewn-pamphlet pages except assemble into several thin signatures (perhaps two-three sheets each) rather than one pamphlet. <i>Note:</i> Make an even number of signatures (e.g., 4, 6, 8, etc.). |
| 2. Cut and fold 2 pages of cardstock, as described above. |
| 3. Assemble the signatures with one of the folded cardstock pages on top and the other on the bottom. Make a small, erasable mark at the top of each signature, so that you will always know the correct orientation for the signatures. |
| B. Sew the signatures |
| 1. Mark sites for two holes on each signature (including the cardstock signatures), following the instructions given for the pamphlet-sewn body, <i>above</i> . |
| 2. Sew the signatures, beginning with the bottom cardstock signature, then the paper signatures, and ending with the top cardstock signature. |

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| <p>4. Cut a piece of thread at least 5 times as long as the height of the book. If the thread is unwaxed, pulled it through a bar of beeswax.</p> <p>5. Begin sewing with the bottom cardstock signature. —Leaving a “tail” 3-4 inches long, sew into the top hole from the outside to the inside, then out the bottom hole. —Place the next signature (the first paper signature) on top of the first. Sew into the bottom hole from the outside, then sew out the top hole. Tighten any slack in the thread.</p> <p>—Make a kettle stitch: pass the needle and thread between the two sections, under the thread connecting them, then pass the needle through the resulting loop and tighten. (<i>See drawings at right.</i>)</p> <p>—Place the next signature on top of the stack. Sew into the top hole from the outside, then sew out the bottom hole, take up any slack, and make a kettle stitch. —Repeat until you have sewn the top cardstock signature into place. After making the usual kettle stitch, make a second one. —Tie the end of the thread to the “tail” of thread, using a square knot. Trim the ends of thread to approx. 1/8 inch.</p> | |
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| <p>Note: It is important to take up the slack as you go on to make firm</p> | |
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| <p>C. Assemble the book</p> | |
| <p>Assemble the book as described for the accordion body version (pp. 3-4).</p> | |

Handout prepared by Addeane Caelleigh (asc8f@virginia.edu) for the Book Making Group at the Virginia Arts of the Book Center, May 2010.

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The Virginia Arts of the Book Center, a program of the Virginia Foundation for the Humanities, is devoted to the art and craft of printing, print making, and book arts. The VABC operates a working studio and print shop open to members and the community.

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