

### **End sheets in Common Use**

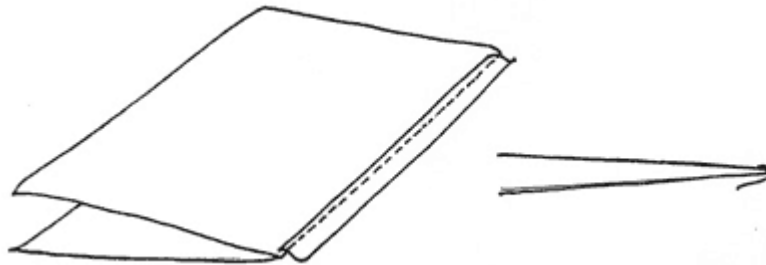
End sheets are designed to provide sound and flexible connections between the binding and the text block. The end sheets discussed here are basic to most simple bindings, and incorporate Japanese tissue hinges to avoid creating a hard edge against the first and last leaves of the book. The Japanese tissue hinge, although soft and flexible, is long fibred and strong and quite able to withstand the constant flexing of an inner joint.

### **The Tipped-On End Sheet**

This end sheet is used when the original sewing is sound and the book is to be re cased. It is used instead of the single-folio end sheet tipped directly onto the first and last leaves, as the flexing action of the flyleaf in this case, tends to pull the first and last leaves off the book. Generally, materials consist of a suitable Japanese tissue (similar to Kitakata) and folios of a suitable end sheet paper, such as Permalife Ledger. Paper fiber machine direction must be parallel to the joint.

#### **I. Processes: Lining the End Sheet**

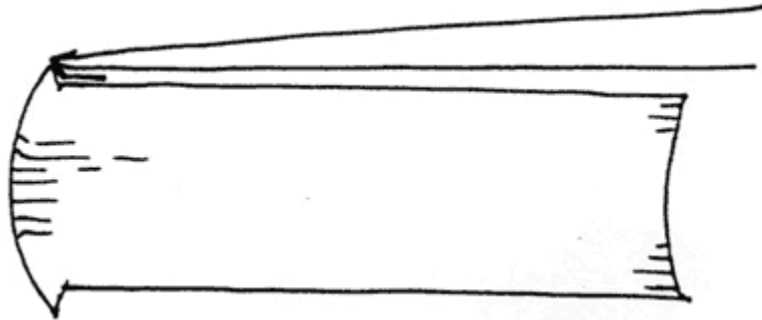
- 1.Strips of Japanese tissue are cut to the height of the end sheet x 1.5 centimeters (5/8"). The end sheet is made up of a single folio slightly larger than the text block.
- 2.A line of P.V.A. adhesive is laid down approximately 3 mm. (1/8") from the folded edge of the end sheet. (If large groups of end sheets are being made, an edge-gluing machine can be used to good advantage; alternatively, the end sheets can be fanned in groups and adhesive applied to the fold steps.
- 3.The Japanese tissue strip is laid onto the line of glue to cover it completely, and set down firmly with the fingers. When the glue is dry, the tissue is folded around the end sheet.



## I. Attaching the End sheet.

1. Ensure that the first and last leaves are firmly attached. If they are loose, they should be secured by hinging, remembering to similarly secure their conjugate leaves. If a few leaves are loose, they should be lightly overcast (see Manual Guide No. 26).

2. A line of adhesive (P.V.A. or mixture) is applied to the inside of the backing shoulder, and the end sheet set firmly into place with the tissue hinge to the book. When both end sheets have been attached, the shoulder is gently set in with a bone folder.



3. As most books in this category will retain their original edges (i.e. not trimmed), laying the end sheet to the head at the front and the tail at the back will more easily facilitate hand trimming.

4. When the book has been gently rounded and backed, it is important that the backbone be properly lined with an appropriate stretch cloth extending approximately 4 centimeters (1 1/2") onto each end sheet. This back lining provides most of the joint fold strength. It should be noted that the inner edge of the tissue is not adhered. This is to avoid the adhesive and the tissue combining to form a hard, knife-like edge against which the outer leaves may break.

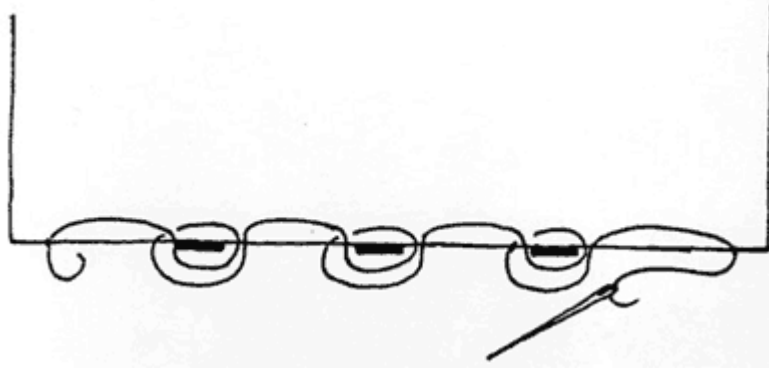
### **The Sewn End Sheet**

This end sheet will normally be used when a book to receive a simple binding needs to be sewn, usually (but not exclusively) onto linen tape.

Processes:

1. The end sheets consist of double folios (i.e. one folio inside the other) with the outer folio prepared as the tipped-on end sheet described above.

2. The end sheets are sewn onto the book in the normal way, except that each tape is completely encircled by the thread presenting the appearance of a continuous line of thread on the inside of each end sheet.



3. When the back is glued up, the loose inner tissue hinge will attach itself to the outer leaves of the book, providing a flexible supplementary attachment while avoiding lateral "pull" strain.

### **The Single-Section End Sheet**

This end sheet is used for single-section, pamphlet-like structure.

Processes:

1. The entire end sheet is made up of a full double-folio wrapped around the text block.
2. A piece of linen or sized cotton (similar to Gane's hinge cloth) is glued and applied evenly around the outer fold to lie approximately 4 centimeters (1 1/2") onto the front and back.
3. When the book is sewn, the needle will pierce the end sheet and linen lining for a secure attachment. If the binding is to be cased, the tie-off knot should be on the outside, with a light touch of P.V.A. on it to prevent loosening.

\*Updated 1988