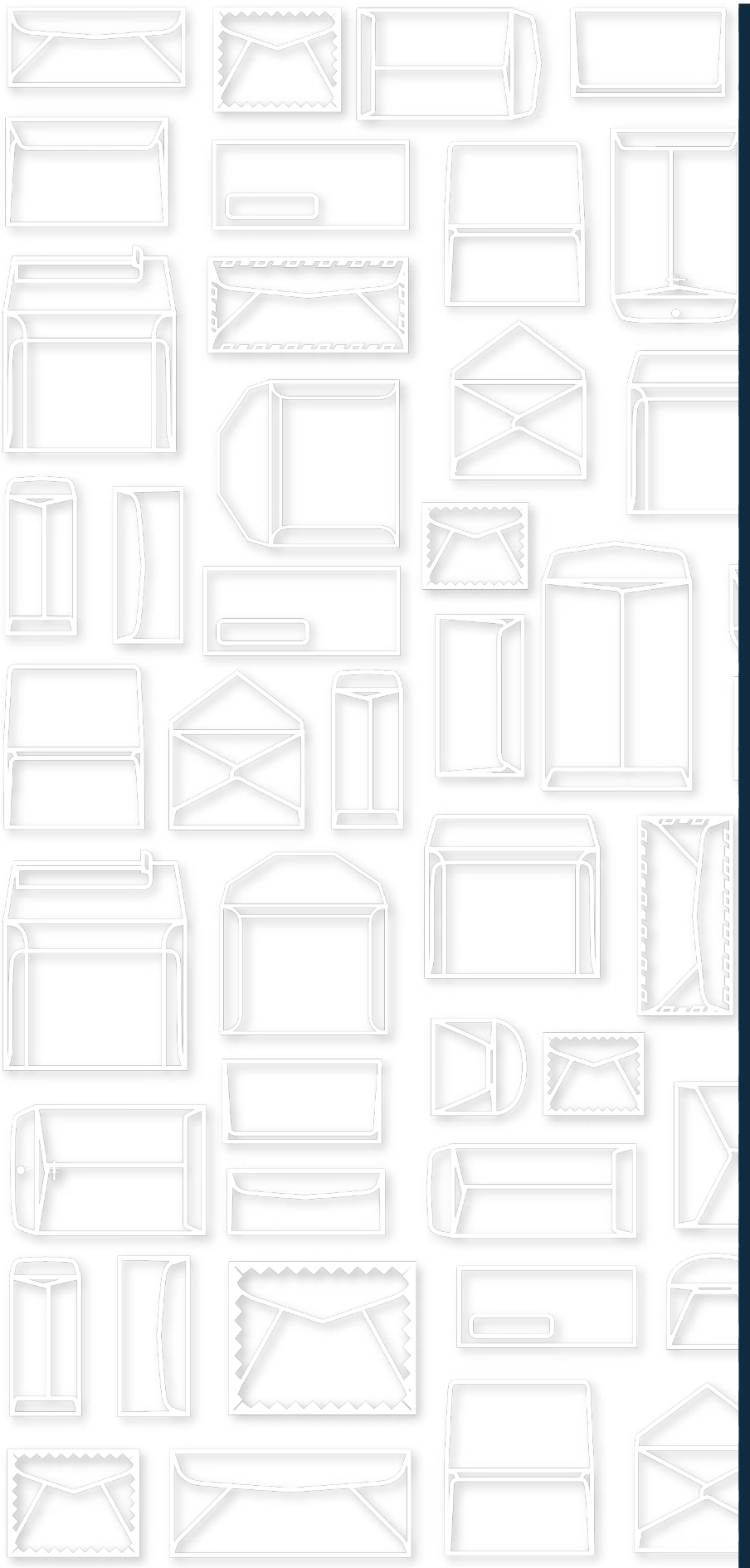


ENVELOPE BASICS

In this section you will find:

Envelope Construction

Seam & Flap Style

How to Measure An Envelope

Envelope Paper & Storage

Cutting & Grain Direction

Closure Methods & Gum

Window Envelopes

ENVELOPE BASICS

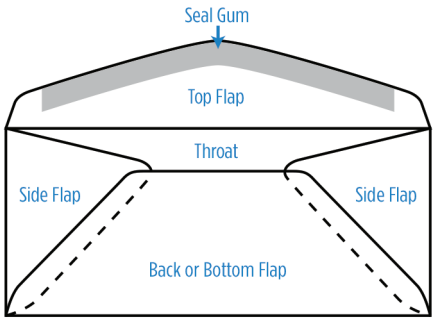
Dimensions and Designations

Envelope sizes are listed in inches with the shortest dimension first, regardless of which end the opening is located. Most envelopes are made to industry specification unless the customer requests a variance.

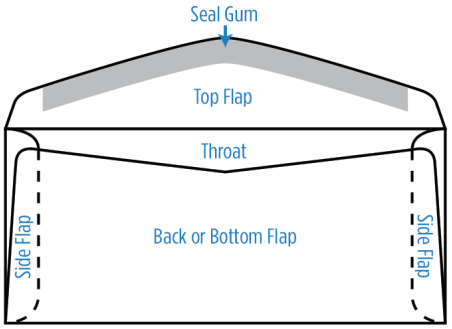
All envelopes are considered either open side or open end. They can be manudactured in an almost endless number of sizes and designs to meet the customer's requirments. Imagination and creativity are extremely important when developing an envelope for maximum response.

Envelope Construction

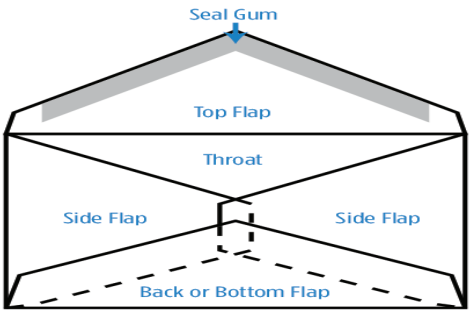
Diagonal Seam



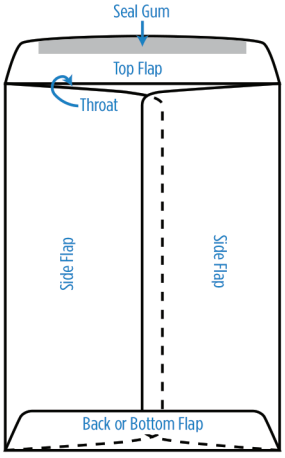
Side Seam



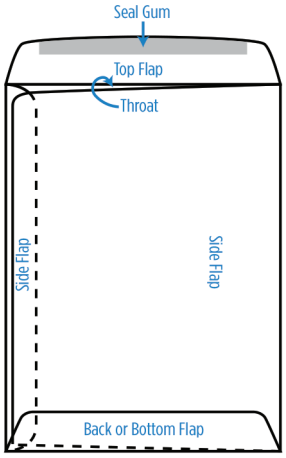
Executive / VH



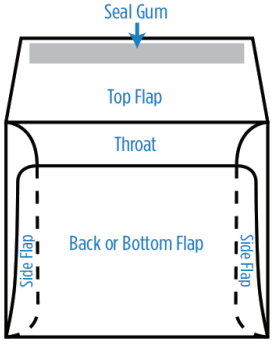
Open End, Center Seam



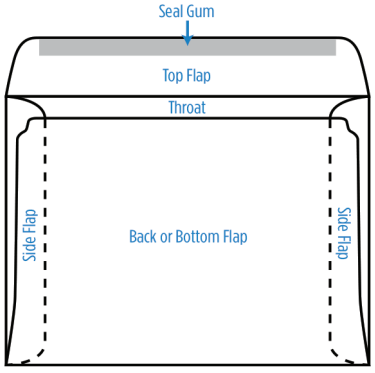
Open End, Single Seam



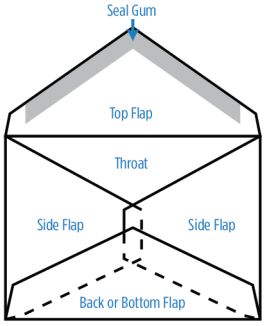
Baronial



Booklet



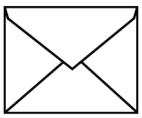
A- Style



ENVELOPE BASICS

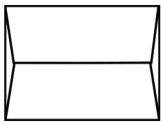
Seam Styles

Seams also determine envelope style and functional application



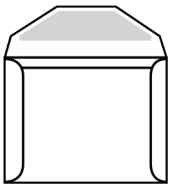
Diagonal Seam

commonly used in Commerical and Baronial envelopes



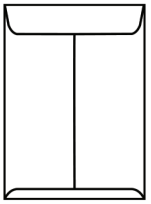
Side Seam

commonly used in booklets, A-Style, side-seam commerical envelopes creating a uninterrupted printing area on the back.



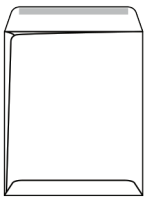
Side Seam - Outside

placed on the outside back to facilitate insertion. This construction must be requested.



Center Seam

the seam is located in the center back of the envelope adding strength for heavier mail pieces.

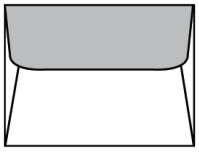


Single Side Seam

this full-sized side flap allows of a larger uninterrupted print. Not suitable for auto-mation.

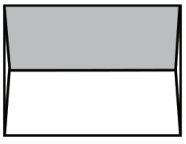
Flap Styles

The seal flap is the part of the nevelope folded over and sealed to secure the contents. The shape of the seal flap is very important in the determination of the envelope's style and functionality.



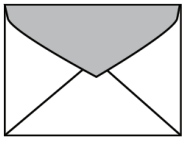
Wallet Flap

similar to the square flap with the exception of rounded corners. This is our standard flap configuration on booklet and catalogs.



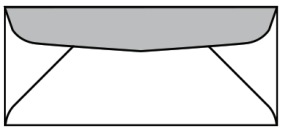
Square Flap

considered more contemporary, it is the most common used for A-Style envelopes.



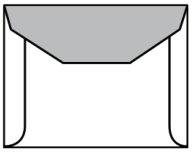
Pointed Flap

elegant, traditional and more formal. Used primarily on Baronial envelopes as well as our Executive / VH configurations.



Commercial Flap

used for commercial envelopes such as the No. 10 which is the most popular envelope in production.



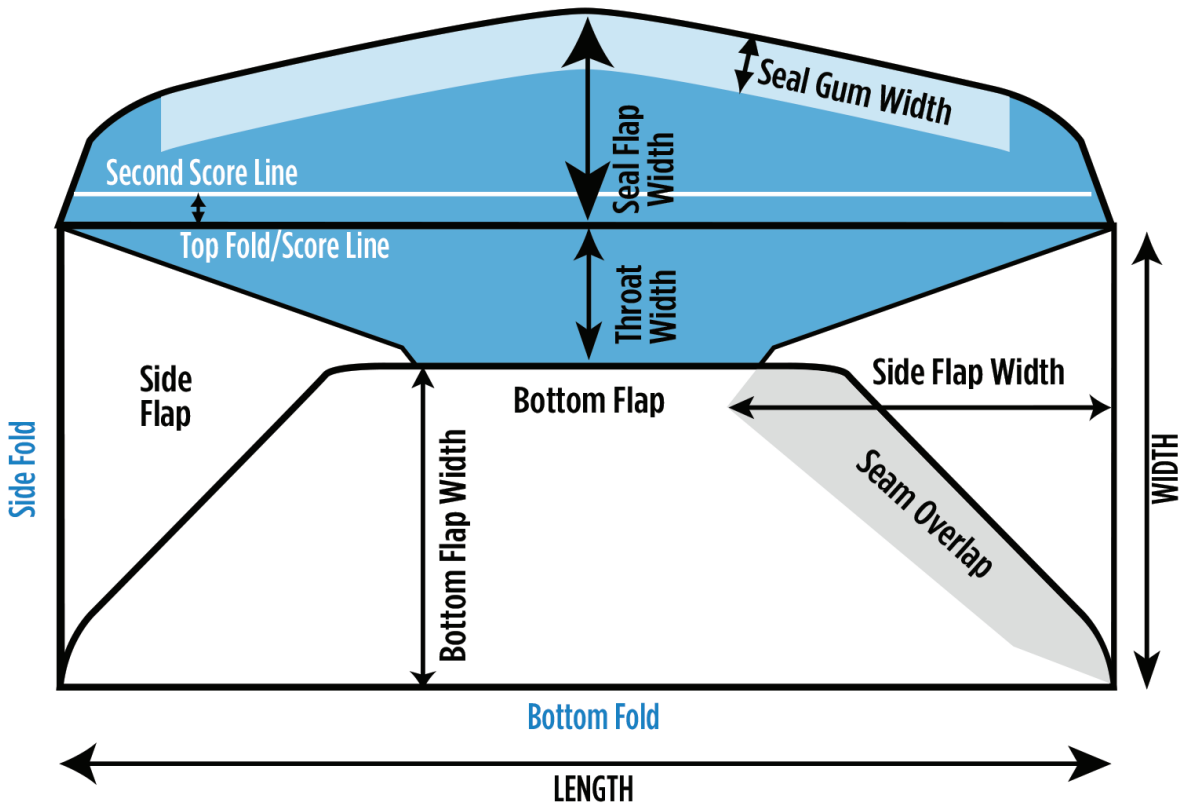
Hexagon Flap

primarily used on document style envelope constructions offering a wide band of fum to secure its contents.

ENVELOPE BASICS

How to Measure An Envelope

- The envelope body is measured from the top fold to the bottom fold and from one side fold to the other. The envelope size is always stated with the shorter dimension first.
- Flap width is measured from the top fold / score-line to the uppermost tip of the flap.
- Seal gum width is measured from the top of the seal flap to where the fum line stops.
- The throad depth is measured from the top fold / score-line to the top edge of the bottom flap.
- Seam overlap is measured from the inside edge of the side flap to the point where it is no longer covered by the bottom flap.
- The bottom flap width is measured from the bottom fold to the highest point toward the envelope center.
- OPTIONAL: Second score lines are sometiems added to allow the flap to extend over a wider insert, such as a bank statement with canceled checks. Measure the second score-line as the distance from the top fold.

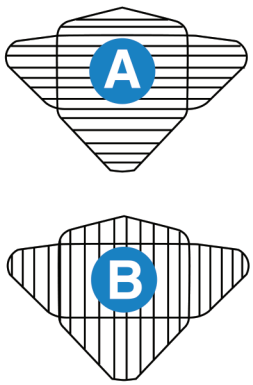


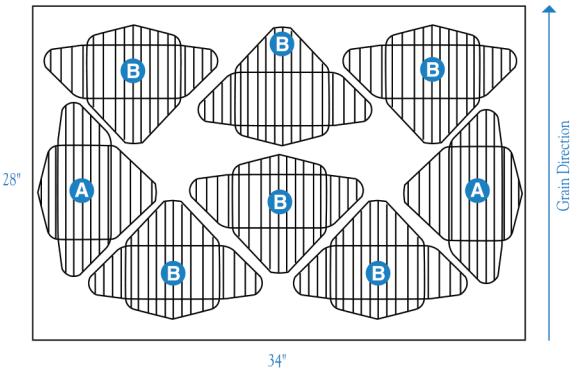
ENVELOPE BASICS

Straight Grain Cutting

Many envelopes created from directional paper, such as laid finish, are often cut straight grain to keep the pattern parallel to the envelope folds.

Straight grain envelopes can be situated two ways:
A. Grain long way of blank
B. Grain short way of blank

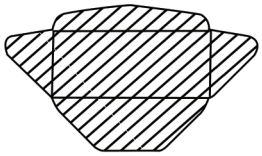


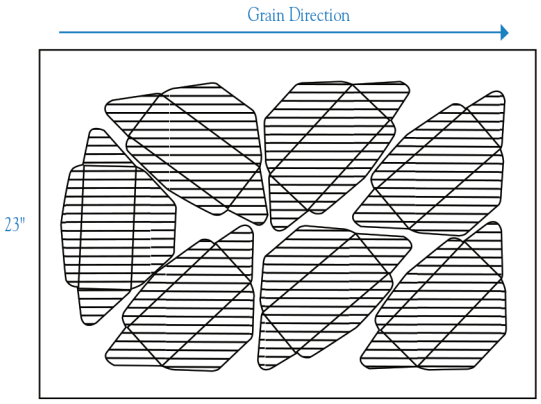


(Illustration not to scale.)

Diagonal Grain Cutting

The most economical cutting meathod for envelopes is diagonal grain because the blanks can be more easilt position for maximum yield.





(Illustration not to scale.)

Number of Envelope Cut Outs from Frequently Used Standard Bond, Writing and Text Paper Sizes***

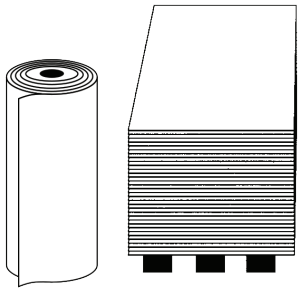
Sheet Size	6 3/4*	Monarch*	No. 10*	A-2**	A-6**	A-7**	9 x 12 Booklet**
17 x 22	5	4	3	-	-	-	-
22 x 34	11	8	6	9	8	6	-
23 x 35	11	8	7	10	8	6	2
24 x 38	13	9	8	-	-	-	-
25 x 38	13	10	8	12	10	8	2
28 x 34	14	10	8	11	10	8	-

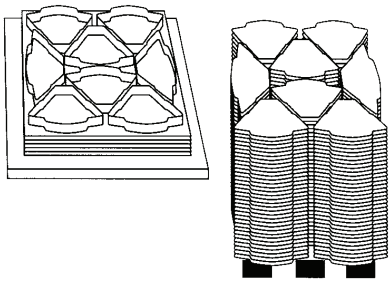
* OSDS Diagonal Seam Diagonal Cut ** OSSS Side Seam Straight Cut *** Subject to change without notice

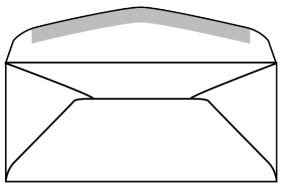
Die Cut Manufacturing Process

1. A lift (apporx. ream) of paper is loaded onto a cutting machine
2. The cutting die is pressed through the paper to form the blanks
3. The blanks are fed into an envelope machine that folds, scores, prints, and applies adhesives to create the envelope.

Multiple Machine Process

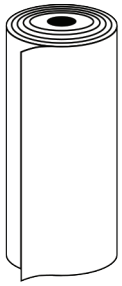




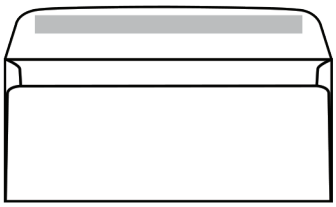


Web Cut Manufacturing Process

1. A roll of paper equal to the total width of the envelope, is loaded on the envelope machine.
2. Internal knives shape the blank.
3. The envelope blank moves through the machine for folding, scoring, printing, and adhesive application to create the final product.



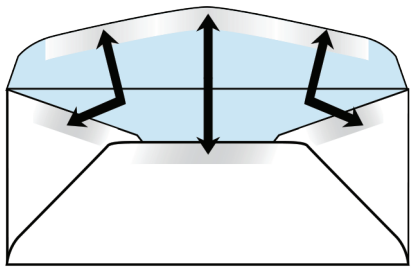
Single Machine Process



Gumming Terms

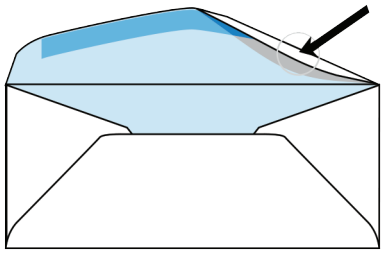
Blocking

The premature activation of the seal gum in areas other than those directly above the bakc seam gum



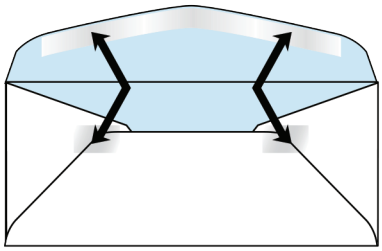
Curl

The degree to which the seal gum application causes the flap to raise its edge on itself, causing the flap to not lie flat.



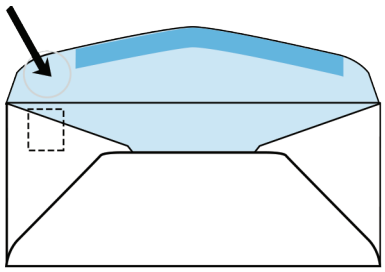
Tabbing

The premature activation of the seal gum at points over the back seam gum



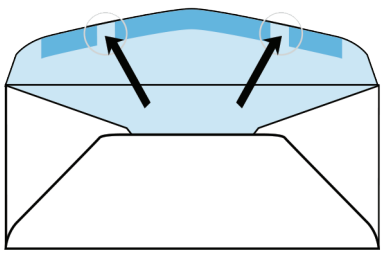
Live Stamp Gumming

The seal gum is eliminated directly beneath where a postage stamp is applied. Generally used when a stamp is to be applied mechanically, it eliminates the possibility for blocking.



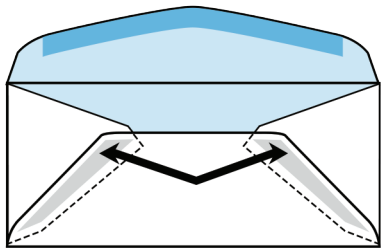
Split Seal

The seal gum application has voids of seal gum over those areas where seal gum would normally rest on top of the back seams to prevent tabbing.



Back Gum

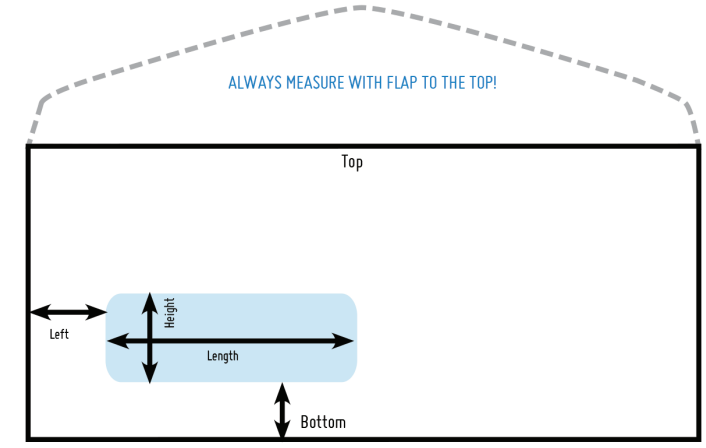
The permanent seal used to bond the bottom flap and the seams together. It must be strong enough to hod the envelope together as it is inserted and sent through the mail. Back gum should not show through or discolor the paper.

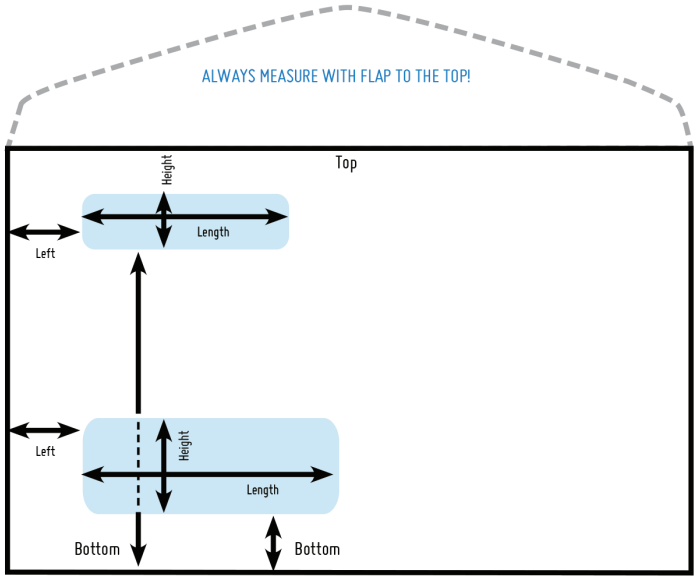


ENVELOPE BASICS

Window Dimensions and Measuring

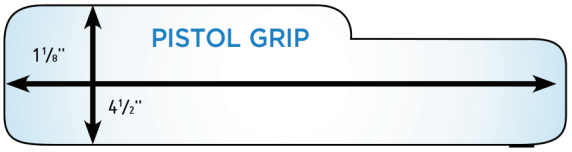
When communicating horizontal window dimensions, always state the height first followed by the length. When plotting the window position, it is critical that the envelope flap is extended and at the top of the envelope. We will always assume the window is horizontal to the flap unless otherwise noted.

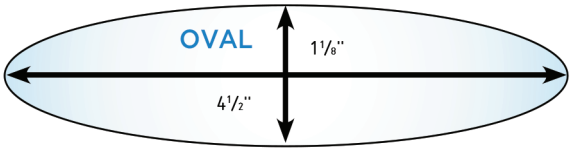




Common Window Configurations

Standard WIndow





Patch Materials

1. **Digital Window / Polyester:** a crystal clear, heat-resistant poly material that resists cracks and / or wrinkles when used in digital printing equipment.
2. **Glassine**: a transparent paper product that is more filmy than poly and susceptible to humidity. 100% recyclable.
3. **Polystyrene**: a plastic film that works well in any normal mail or print envrioment. This is the most popular / standard material in use today.
4. **Cellophane**: a clear glass like material that is more expensive than poly. Will not work in thermographic or laser equipment.
5. **Open**: no patch material is used.