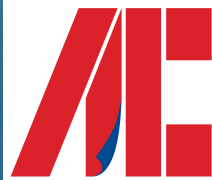


ENVELOPE BASICS

EVERYTHING
YOU NEED TO
KNOW ABOUT
ENVELOPES!



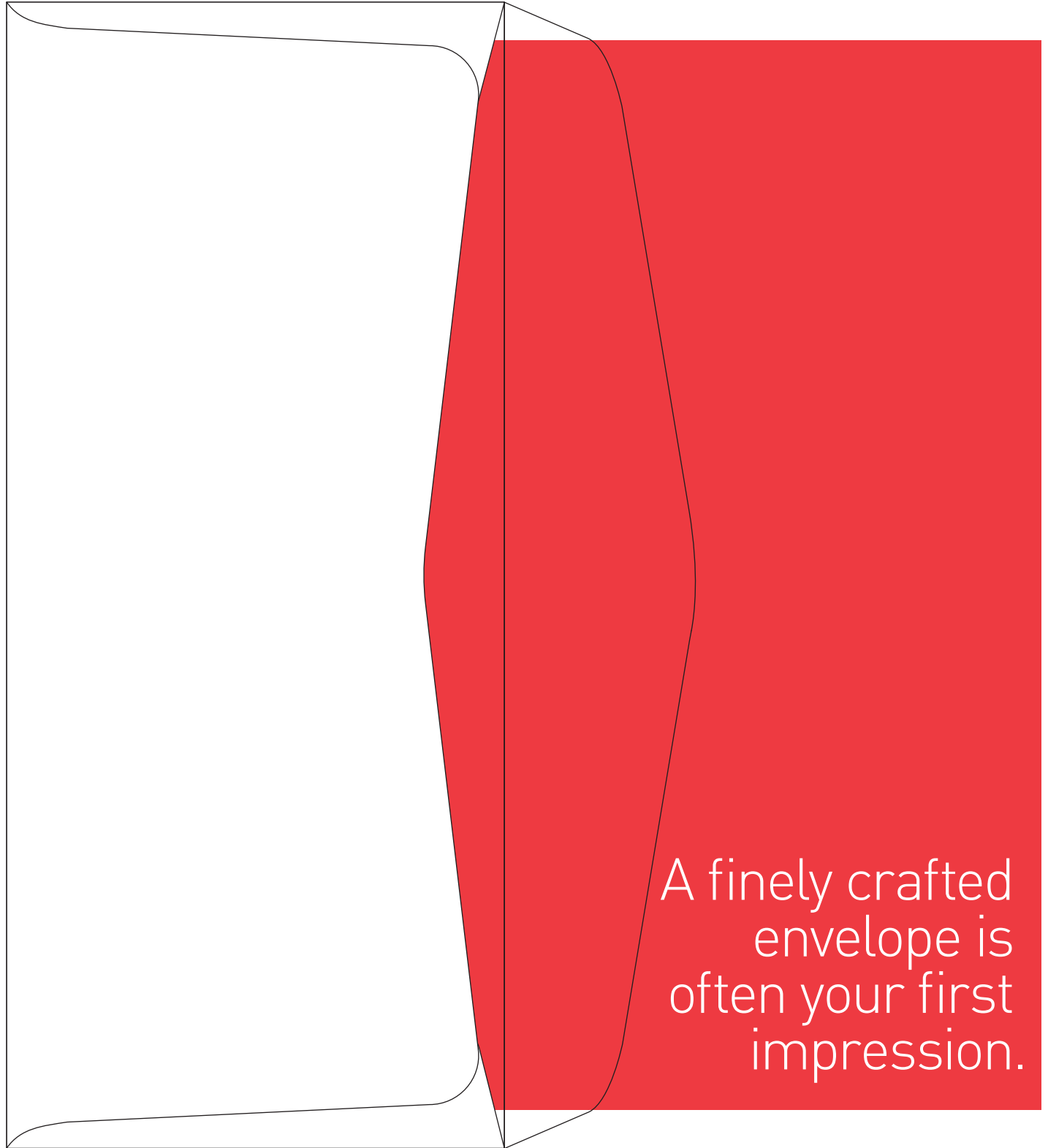
**Alexander Clark
Printing**

An Employee Owned Company

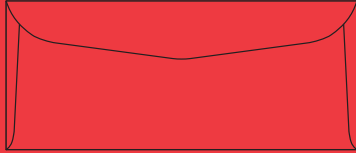


ENVELOPE BASICS

A GUIDE TO MEASURING AND WRITING SPECIFICATIONS



A finely crafted
envelope is
often your first
impression.



AN ENVELOPE IS A STATEMENT

Sometimes carrying one
in the form of a monthly bill.
Overall, it can be the embodiment
of your brand or message.

A well-crafted mail campaign should include envelope design. No matter the creative direction, there's a whole lot that goes into envelope measurement and design. *Envelope Basics* is your guide to learning about just that, with helpful tips to help your envelope pop in the hands of your recipient.

Did you know?

ENVELOPE BASICS

ELEMENTS

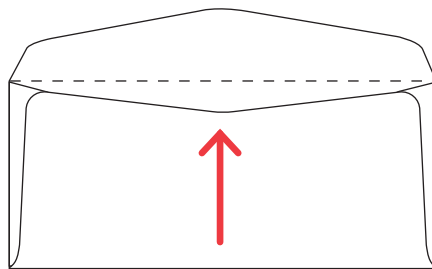
ENVELOPE BASICS

OPENINGS

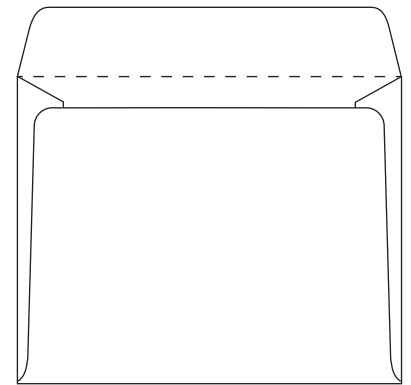
There are two main types of envelopes: OPEN SIDE and OPEN END.

OPEN SIDE

Open side envelopes have an opening on the longer dimension. Letter size envelopes are known as a business or commercial style, and the larger open side envelopes are referred to as booklets or flats*.



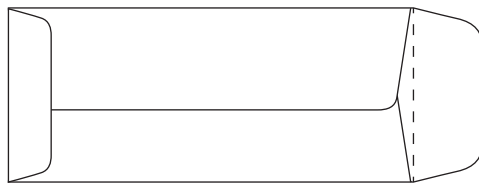
OPEN SIDE



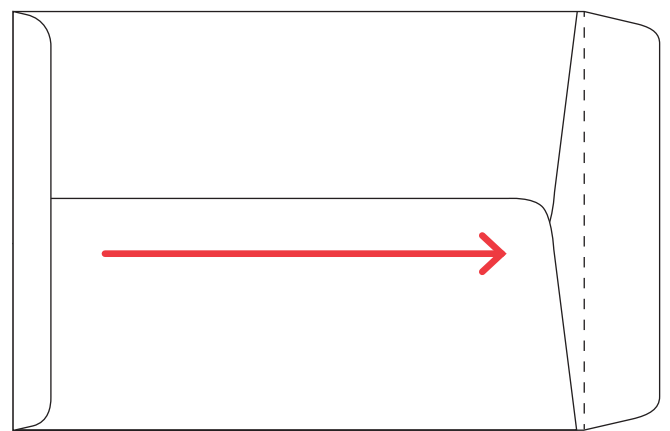
OPEN SIDE

OPEN END

Open end envelopes have an opening on the shorter dimension. Coin envelopes are open end envelopes that are smaller in size. Larger open end envelopes, or flats*, are commonly used for catalogs and policies for financial or insurance information.



OPEN END



OPEN END

* The Postal Service uses the word "flats" to refer to large envelopes, newsletters and magazines. The words large envelopes and flats are used interchangeably.

ENVELOPE BASICS

FLAPS

Envelope flaps are the area on the back of an envelope that are folded to secure the inner contents. There are various types of envelope flaps.

STRAIGHT

Straight or square flaps have a clean design with a straight-edge flap. Ideal for envelopes with graphics printed across the entire back of the envelope, the straight flap is the *most common envelope flap style*.

COMMERCIAL

A commercial flap is a common bowed or contoured flap with angled shoulders and a scooped throat, offering premium, high-speed inserter performance.

BANKERS

A longer, bowed or contoured flap that contributes to the elegance of a bank envelope.

WALLET

A straight flap envelope designed with an extra-long, deep flap and wide-gummed area. Wallet flap envelopes are used primarily by banks and investment firms, as they offer reliable document protection.

REVERSE

Reverse flaps are designed so the flap is at the bottom fold when the envelope is oriented to properly read text on the face of the envelope.

REMITTANCE

A straight, deep flap that extends almost to the bottom of the envelope. These large flaps can be printed on the inside and used as a form to collect important information that can be sealed and hidden for sending.

BANGTAIL

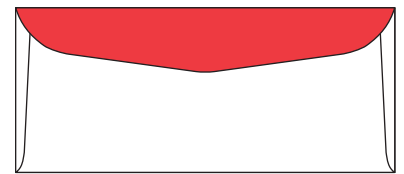
A bangtail envelope features an extra “tail” flap that is printed as a form and perforated along the top of the envelope’s back panel. This design allows users to tear it off, fill out information and place this “tail” flap back into the envelope for sending.

BARONIAL or ANNOUNCEMENT

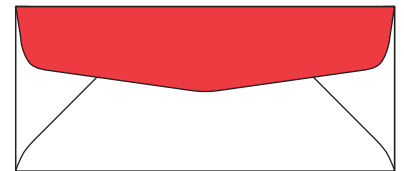
Two diagonal lines come together to create a pointed v-shaped flap, and commonly feature diagonal side seams. The baronial envelope has a deep-pointed flap and is popular for use on greeting cards and social stationery. *This style is not recommended for printing or automatic insertion.*



STRAIGHT



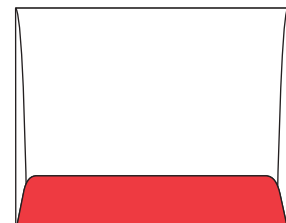
COMMERCIAL



BANKERS



WALLET



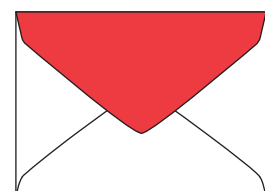
REVERSE



REMITTANCE



BANGTAIL



BARONIAL or ANNOUNCEMENT

ENVELOPE BASICS

SEAMS

The type of seam can vary depending on how the envelope will be used, and is dictated by the type of equipment the envelope is made on.

DOUBLE SIDE SEAM

Double side seams tuck underneath the back panel along the sides of the envelope. They are often seen on open side business or commercial envelopes. They're manufactured on web or die cut equipment, and because of the space open on the back of the envelope, are ideal for printing transpromotional messages – copy on the outer envelope to help cross-sell, up-sell, reinforce brand, etc.

DIAGONAL SIDE SEAM

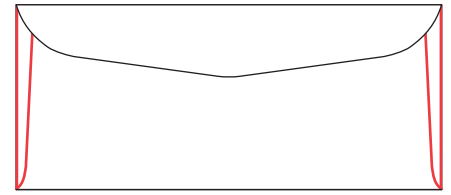
Diagonal side seams run diagonally across the back of an envelope. They're manufactured on die cut equipment and are often used for smaller order quantities under 100,000 envelopes.

CENTER SEAM

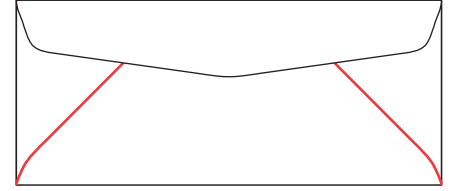
Usually, a catalog, policy or coin open end envelope has a center seam. The seam line is slightly off centered to allow for a gum adhesive to join the seams underneath.

SINGLE SIDE SEAM

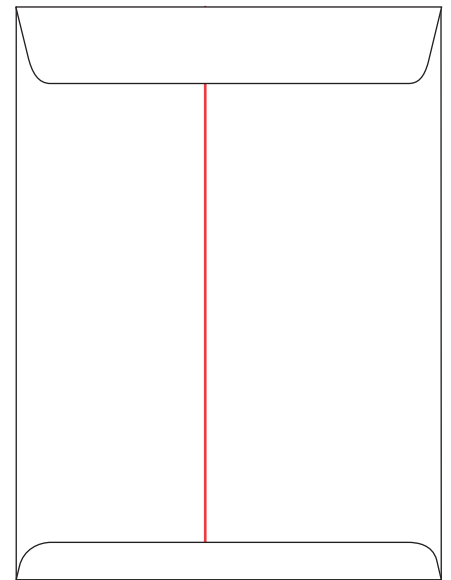
A single side seam can be used on an open end envelope. The seam can be oriented on the left or right.



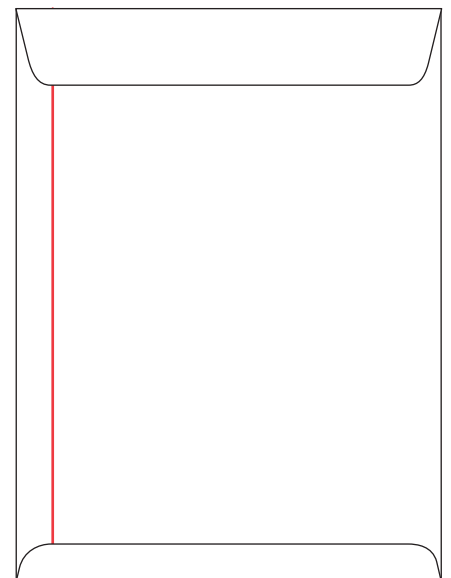
DOUBLE SIDE SEAM



DIAGONAL SIDE SEAM



CENTER SEAM



SINGLE SIDE SEAM

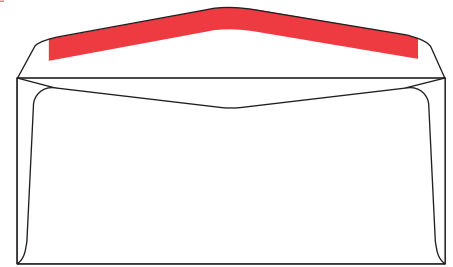
ENVELOPE BASICS

CLOSURES

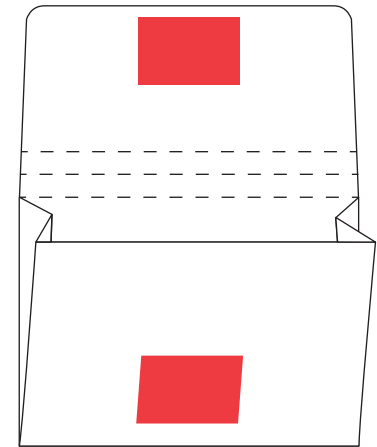
Envelopes can hold important and confidential information. An envelope closure functions to keep your private information secure.

TYPES OF CLOSURES

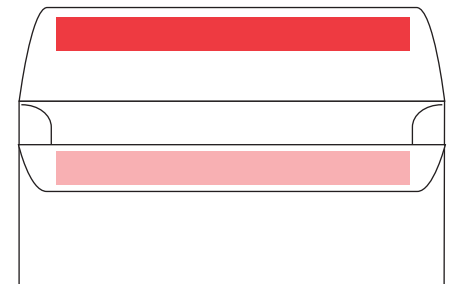
- **REMOISTENABLE GUM**
This is the most common way to close an envelope. The adhesive is a water-soluble gum. Flaps can be fully or partially covered with remoistenable gum.
- **LATEX GUM (also called SELF-ADHESIVE GUM)**
Latex gum is a pressure-sensitive gum applied along the edge of the flap and/or the upper part of the back of the envelope to create a self-sealing envelope. It has a limited shelf life. Here are different types of latex gums:
 - **SEAL 'N RESEAL®** is a pressure-sensitive gum that is used on photo envelopes. It allows for multiple openings and closings of the flap.
 - **TOUCH-'N-SEAL®** is a single-use, pressure-sensitive gum applied to banking and turn-up, turn-down envelopes. The closure only works once. This type of gum adheres to other gum.
 - **PEEL-N-SEAL** is pressure-sensitive gum with a waxy, release coat paper. Because the waxy paper covering the gum must be removed, these types of sealants are not compatible with inserter machines. This type of gum adheres to paper.
- **STRING and BUTTON**
Also known as "tension tie" or string and button. This closure features buttons on the flap and back of the envelope that are secured with a string.



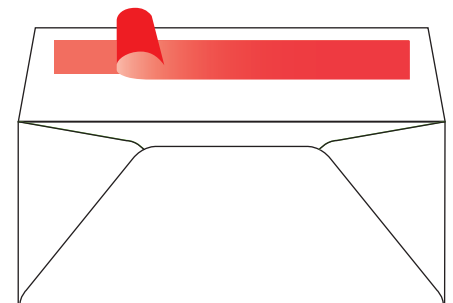
REMOISTENABLE GUM



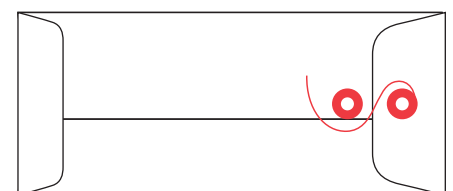
SEAL 'N RESEAL®



TOUCH-'N-SEAL®



PEEL-N-SEAL



STRING and BUTTON

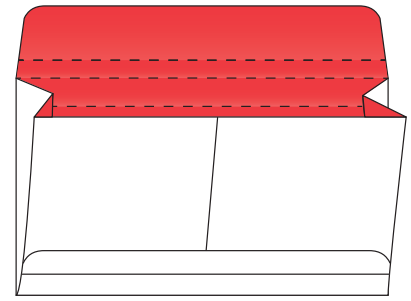
ENVELOPE BASICS

FEATURES

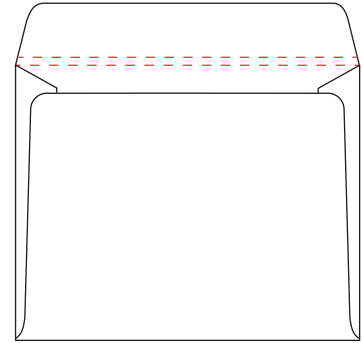
Features on an envelope can be functional in serving a design purpose. They can also help engage the mail recipient to look, open and act.

OTHER ENVELOPE FEATURES

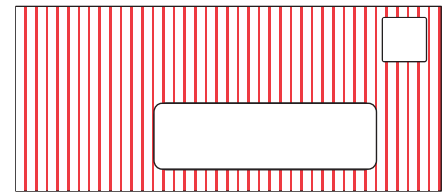
- **EXPANSION**
Used for bulky mailings, these envelopes feature a gusset in the side that allows the envelope to expand. The gusset should be fully opened before measuring and dimensions for an expansion envelope should be stated SHORTEST x LONGEST x EXPANSION DEPTH.
- **DOUBLE SCORE**
An additional score line usually positioned about $\frac{1}{8}$ " to $\frac{1}{4}$ " down from the regular seal flap score. It is used on envelopes holding thicker contents to relieve pressure on the seal flap and keep it secure.
- **EMBOSSING**
A special roller is placed on the folding machine and creates texture on plain paper to give it a high-end, appealing look and tactile feel. Envelopes can be spot embossed (limited to a single area) or embossed overall.
- **INVOLVEMENT DEVICES**
Engaging mail features can help increase customer attention spans and response rates. Involvement devices such as repositionable sticky notes or zip strips call for recipients to interact with the envelope.
- **LINERS**
Envelopes can be enhanced with a color or foil liner to give a more elegant or sophisticated look.



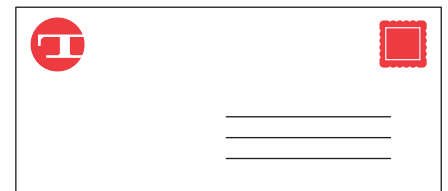
EXPANSION



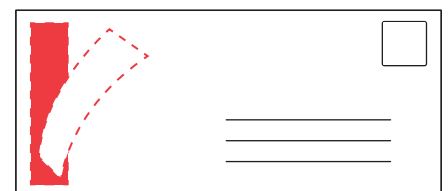
DOUBLE SCORE



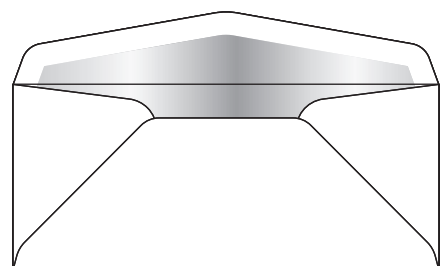
OVERALL EMBOSSING - TEN-GROOVE



SPOT EMBOSSING - INDICIA



INVOLVEMENT DEVICE - ZIP STRIP



LINERS

ENVELOPE BASICS

PRINTING

Printing on the envelope is your opportunity to add color, personality, and in some cases, life to your envelope.

Printing can be done either before or after the envelope is sent to a web or blank converting press. A web converting press is one that accepts continuous rolls of paper directly to the folding machine for cutting, folding and gluing. A blank converting press accepts die cut paper in the form of an envelope, which is then folded and glued.

Here's an overview of the types of printing processes and options available.

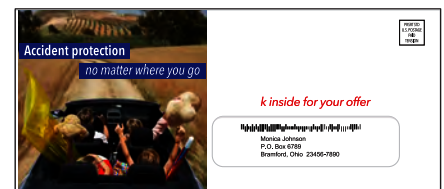
- **FLEXOGRAPHIC** – Polymer plates directly transfer ink to the paper like a stamp. Flexographic printing can be done before or after being run through a folding machine.
- **ENHANCED FLEXOGRAPHY** – Typically used to print 4-color process (CMYK) imagery, enhanced flexography uses a central impression print cylinder to achieve tighter print registration and digital printing plates to achieve finer screens and print resolution on calendarized papers. Compared to regular flexographic printing, enhanced flexography enables printers to deliver more elaborate and higher quality images.
- **OFFSET LITHOGRAPHY** – This indirect, offset printing process offers the highest quality. It is ideal for photographs, halftones and fine screens. Offset lithography printing can be done on a web or blank converting press depending on the application and size of the run.
- **SPECIALTY PRINT OPTIONS**
 - **TECHNOLOGY – AR** (augmented reality) and QR codes are ways to bridge physical and digital communications.
 - * AR codes are a live direct or indirect view of a physical, real-world environment whose elements are augmented (or supplemented) by computer-generated sensory input such as sound, video, graphics or GPS data.
 - * QR codes consist of an array of squares that can be scanned and read by a machine. QR codes are typically used for storing URLs and other information for reading after scanned by a smartphone camera.
 - **SECURITY TINT** – Patterned, opaque printing on the inside of an envelope for added security. Custom tinting is available.
 - **COATING** – A coating is a covering printed on the paper to provide a protective finish or to add a creative touch. A velvety soft to the touch or sparkly iridescent coating can add sophistication to your mailing.



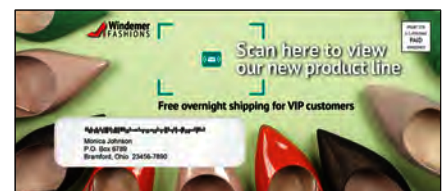
FLEXOGRAPHIC



ENHANCED FLEXOGRAPHY



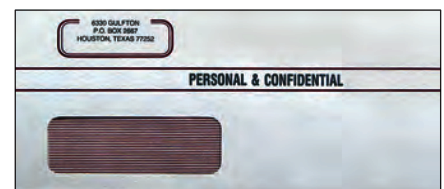
OFFSET LITHOGRAPHY



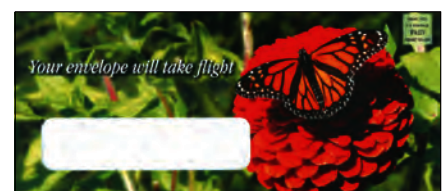
TECHNOLOGY – AUGMENTED REALITY



TECHNOLOGY – QR CODES



SECURITY TINT



COATING - SOFT TO THE TOUCH

ENVELOPE BASICS

PAPER

A variety of papers are used when constructing an envelope, depending on need. The envelope's use will determine what type of paper works best.

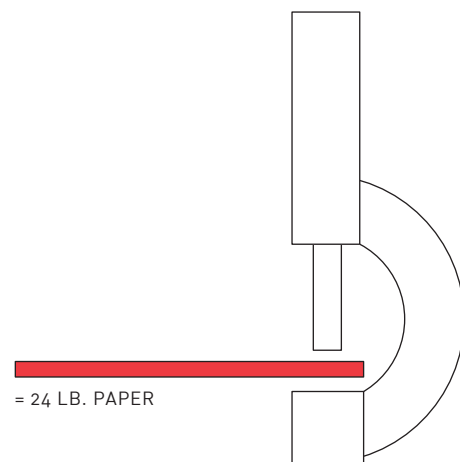
BASIS WEIGHTS

Basis weight describes the collective weight of the fibers that make up the paper. In general, the basis weight is calculated as the weight of 500 sheets (e.g. a ream of paper) in the basic size of 17" x 22" for envelope paper for the given paper grade. For example, a 28# envelope grade paper represents the weight of 500 17" x 22" sheets and not the actual envelope itself.

Another method to determine paper basis weight, also known as paper substance weight, is by measuring the thickness or caliper of the paper. Below is a reference table of some common substance weights:

SUBSTANCE WEIGHT	NOMINAL CALIPER (MILS)
20	4.2 – 4.4
22	4.5 – 4.7
24	4.8 – 5.1
28	5.4 – 5.7

Did You Know: The minimum paper basis weight for USPS automation mailings is 50 pounds (e.g. 20 pound wove) or equivalent.



A CALIPER IS USED TO GAUGE PAPER THICKNESS

ENVELOPE BASICS

PAPER *continued*

MAIN ENVELOPE PAPER GRADES

There are six main types of paper grades used in envelope production.

- WOVE**
 Wove is paper with short fibers. This paper grade prints well, is smooth and economical. Wove paper is available in multiple weights and colors. In original form it features a brightness level of 92, which is known as Bright White paper.
- SURFACED ENHANCED WHITE WOVE**
 This paper is also known as calendarized or super calendared paper. It has a “hard,” smoother finish and is ideal for heavy ink designs and 4-color image processes. Surfaced Enhanced White Wove offers fewer basis weights than Wove, and has a brightness level of 92 in its original form.
- KRAFT**
 Kraft paper has longer and stronger fibers than Wove paper, but does not print as well. Kraft is available in plain colors (most commonly in brown stock).
- RECYCLED**
 Recycled paper is not as durable as wove. The most commonly used types of recycled paper are made up of 10 percent and 30 percent post-consumer waste.
- SPECIALTY**
 Specialty papers are available in many colors, finishes, textures and weights. Due to the many options, they are ideal for direct mail envelopes.
- TEAR-RESISTANT**
 There are many options available for tear-resistant paper. It is almost indestructible and will not tear in typical applications.

PRINTABILITY	AVAILABILITY	COST	STRENGTH/ DURABILITY
--------------	--------------	------	-------------------------

--	--	--	--

WOVE

--	--	--	--

SURFACED ENHANCED WHITE WOVE

--	--	--	--

KRAFT

--	--	--	--

RECYCLED

VARIABLE			
----------	--	--	--

SPECIALTY

--	--	--	--

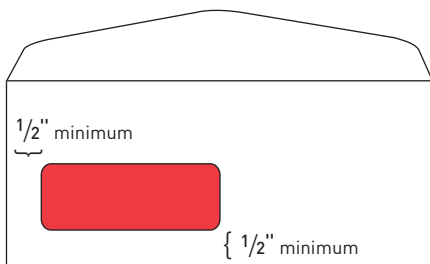
TEAR-RESISTANT

ENVELOPE BASICS

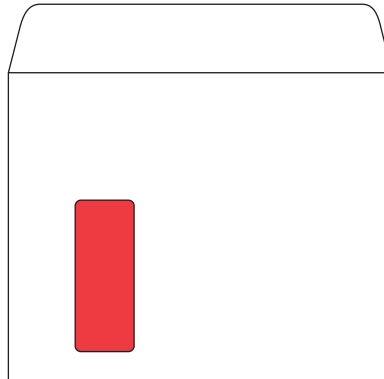
WINDOWS

Envelope windows can help call out addresses and return addresses through openings in the face of the envelope.

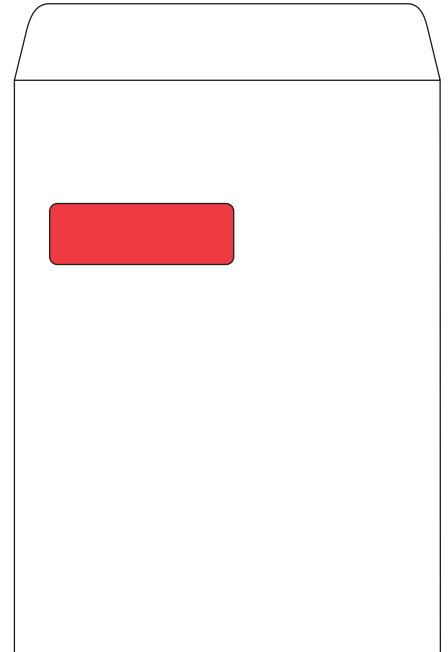
not actual size



HORIZONTAL WINDOW on Open Side Envelope



VERTICAL WINDOW on Open Side Envelope



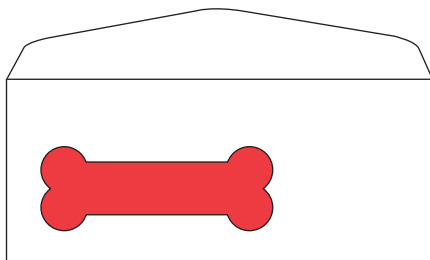
HORIZONTAL WINDOW on Open End Envelope

CONSTRUCTION

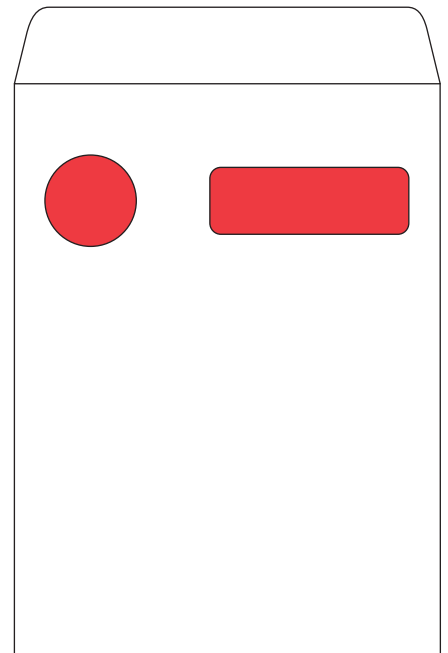
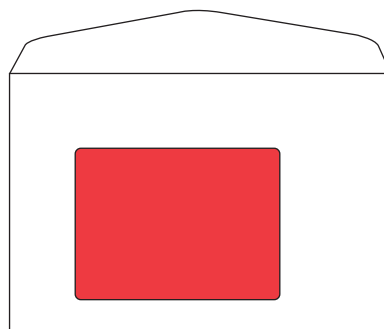
Windows are cut during the folding process, and can be cut in a standard shape or in an attention-grabbing design. At minimum, windows should be placed $\frac{1}{2}$ " from the side and the bottom to ensure adequate room for the patch adhesive.

DID YOU KNOW?

Custom window designs are available in an endless variety of shapes and sizes, and can help engage your mail recipient.



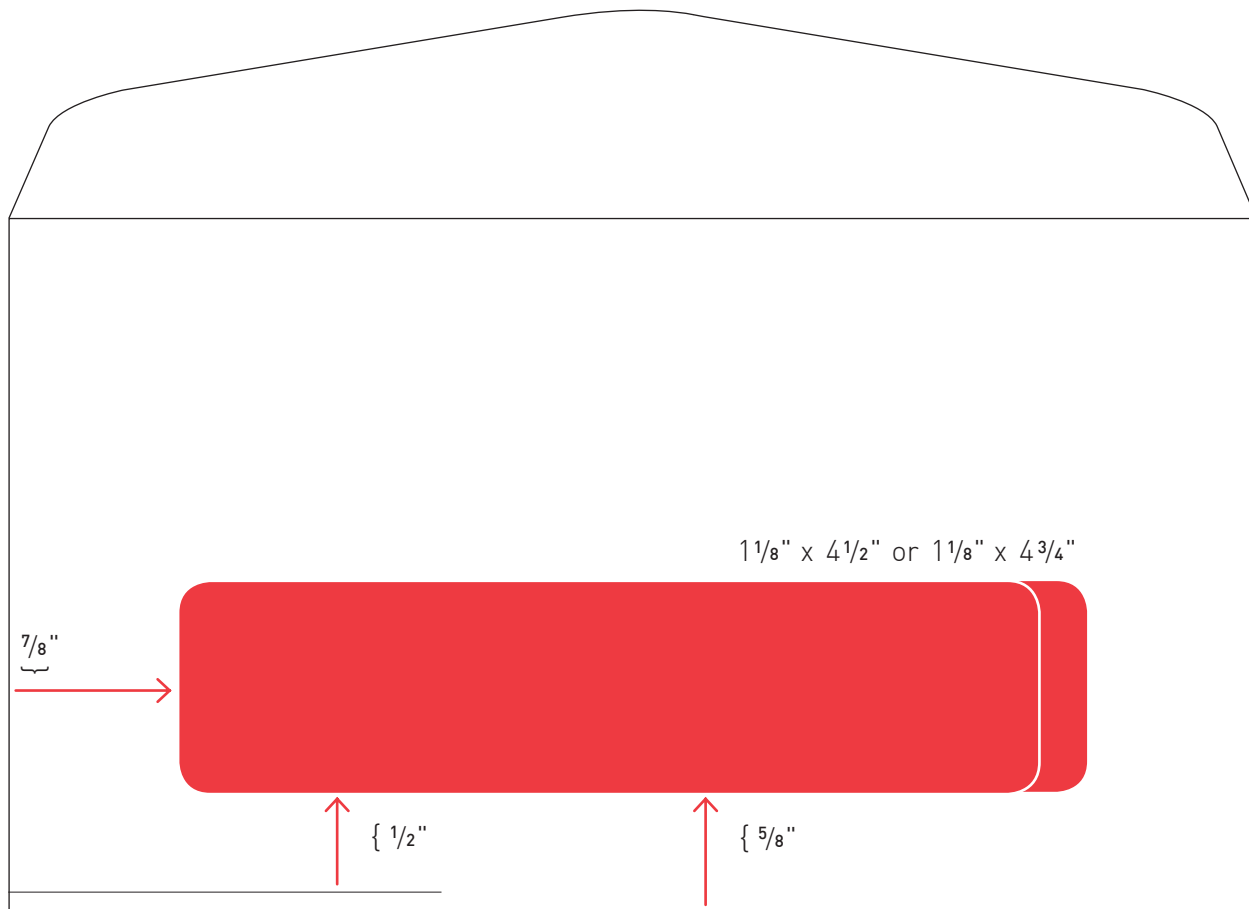
CUSTOM WINDOWS



ENVELOPE BASICS

WINDOWS *continued*

STANDARD WINDOW SIZES



6 3/4 BUSINESS ENVELOPE

Size $1\frac{1}{8}'' \times 4\frac{1}{2}''$ or $1\frac{1}{8}'' \times 4\frac{3}{4}''$ is considered a standard size window. The standard placement is $\frac{7}{8}''$ from left and $\frac{1}{2}''$ or $\frac{5}{8}''$ from bottom.

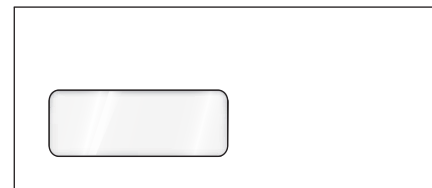
ENVELOPE BASICS

WINDOWS *continued*

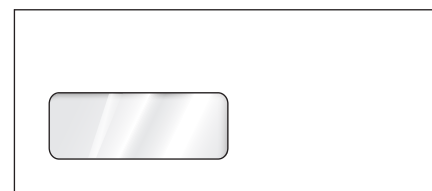
WINDOW PATCH

A variety of materials are available for the window patch.

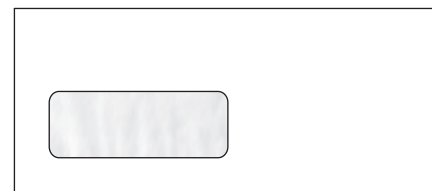
- POLYSTYRENE is a translucent, petroleum-based material that is used as a window patch. Filmview and trycite are two types of polystyrene window film.
 - FILMVIEW is the most common and cost-effective material, and is recyclable and postal approved. It is available in a range of different gauges.
 - TRYCITE is a more brittle material and prone to scratches. It is highly reflective, and sometimes the shine or gloss is too reflective for postal system sorting. Trycite also has a heavier gauge and is a more expensive option.
- GLASSINE is a milky, cloudy material made from wood products. It is susceptible to moisture and humidity.
- OPEN FACE or OPEN PANEL windows are windows that do not have a patch over the opening. This option is less expensive but highly susceptible to snags and tears in the inserting process and postal stream. They're not acceptable on most international mailings, including Canada.



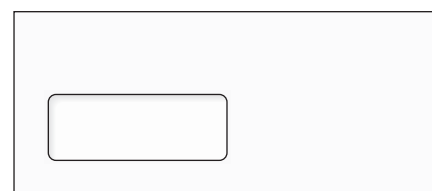
POLYSTYRENE - FILMVIEW



POLYSTYRENE - TRYCITE *



GLASSINE *



OPEN FACE or OPEN PANEL

Did you know?

ENVELOPE BASICS

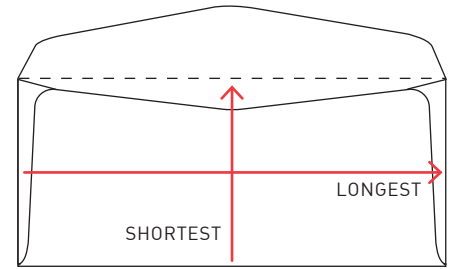
MEASURING

ENVELOPE BASICS

MEASURING

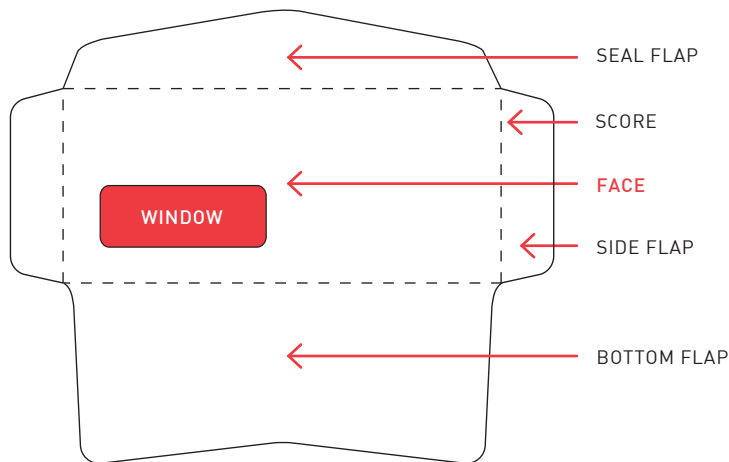
HOW TO MEASURE AN ENVELOPE CHECKLIST

- ✓ Before measuring an envelope, make sure the envelope is empty in order to yield accurate dimensions.
- ✓ Use a legitimate scale or ruler when measuring.
- ✓ Measure the envelope on a flat surface.
- ✓ Measurements should be captured to the nearest one-sixteenth of an inch.
- ✓ Envelope dimensions are always stated with the shortest measurement listed first.

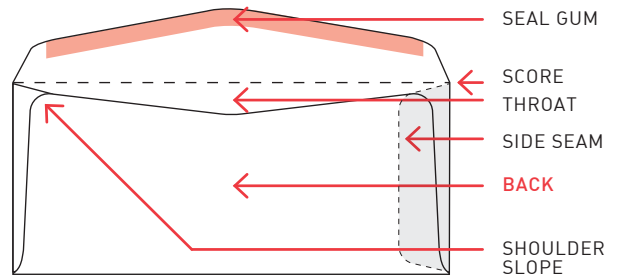


ELEMENTS OF AN ENVELOPE

The non-insertable side or FACE of an envelope features areas for potential address windows and return windows. The insertable side of an envelope is known as the BACK.



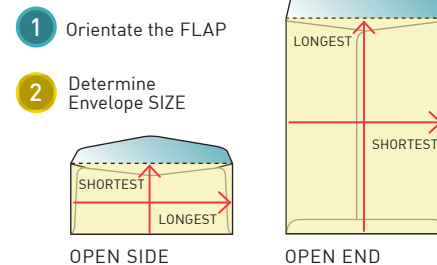
FACE - NON-INSERTABLE SIDE



BACK - INSERTABLE SIDE

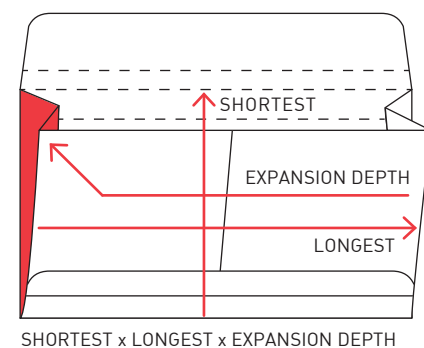
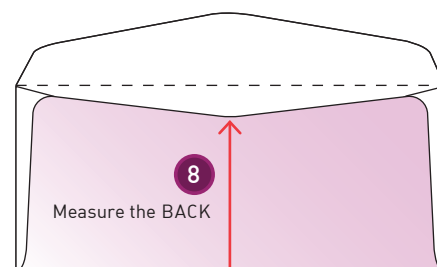
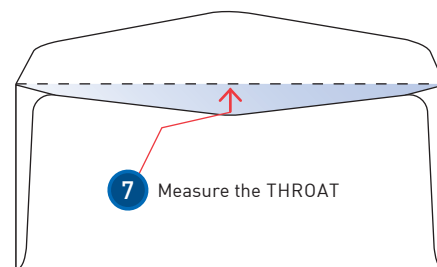
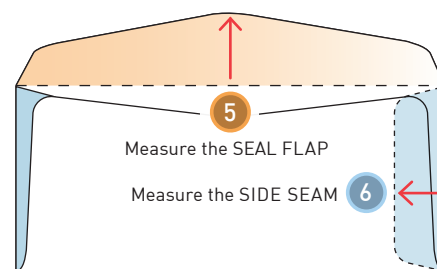
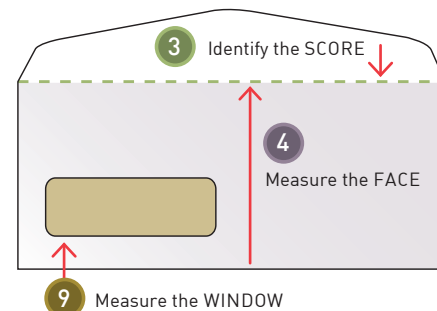
ENVELOPE BASICS

MEASURING AN ENVELOPE



ENVELOPE MEASUREMENTS

- 1** ORIENTATE THE FLAP
In order to determine the type of envelope, observe the orientation of the flap. Remember, open side envelope seal flaps are on the wide side and open end envelope flaps are on the narrow end. Place the envelope so the flap lays at the top.
- 2** DETERMINE ENVELOPE SIZE
Remember, the shortest measurement is always listed first, whether it's an open side or open end envelope.
- 3** IDENTIFY THE SCORE
Find the groove in the paper where the flap fold is made.
- 4** MEASURE THE FACE
Measure from the bottom of the envelope to the top of the envelope at the score.
- 5** MEASURE THE SEAL FLAP
Flap length is measured from the centermost part of the seal flap to the flap score. *For reverse flaps, consult your sales representative to ensure accurate measurements.*
- 6** MEASURE THE SIDE SEAM WIDTH
The side seam is the area that holds the back to the face of the envelope. In order to measure side seam width, the envelope must be carefully opened to reveal the inner seam.
- 7** MEASURE THE THROAT DEPTH
Throat depth is measured from the score line to the top of the back of the envelope at its centermost point.
- 8** MEASURE THE BACK
The back is measured from the bottom of the envelope to the center of the top (the lowest point on the envelope).
- 9** TAKE WINDOW MEASUREMENTS *Follow steps on page 18.*



EXPANSION ENVELOPE MEASUREMENTS

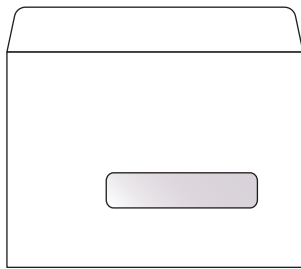
When working with an expansion envelope, the gusset should be fully opened before measuring. Measurements should be stated SHORTEST x LONGEST x EXPANSION DEPTH.

ENVELOPE BASICS

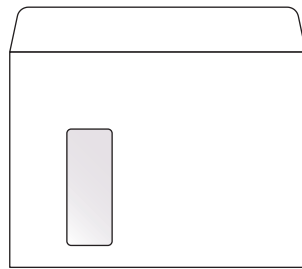
MEASURING A WINDOW

WINDOW MEASUREMENTS

- 1 ORIENTATE THE FLAP**
 Before measuring for window placement, the envelope should be oriented so the flap is at the top *regardless if it's an open side or open end envelope*.
- 2 MEASURE WINDOW PLACEMENT**
 Window placement is measured first from the left and then from the bottom of the envelope.
- 3 DETERMINE WINDOW SIZE**
 Dimensions are always listed VERTICAL x HORIZONTAL, and reflect the window opening (versus the dimensions of the window patch). Most windows are horizontal formats.
- 4 IDENTIFY WINDOW ORIENTATION**
 Horizontal windows are parallel to the bottom flap and the vertical measurement is shorter than the horizontal measurement. Vertical windows are perpendicular to the bottom flap and the vertical measurement is longer than the horizontal measurement. *While the longer vertical measure will help indicate if the window should be vertical, it is good practice to specify when a "vertical" window is requested on an order form.*



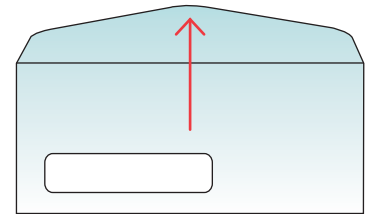
HORIZONTAL WINDOW
BOOKLET



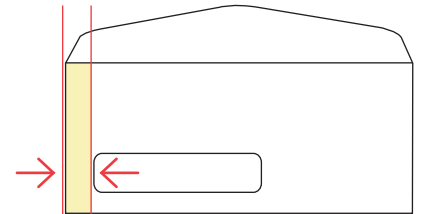
VERTICAL WINDOW
BOOKLET

4 Identify WINDOW ORIENTATION

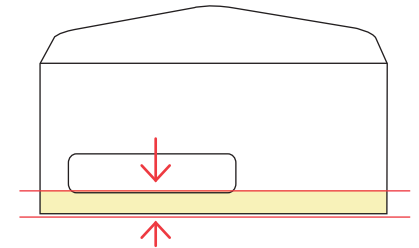
- 5 SPECIFY WINDOW DESIGN**
 Windows can be specified according to a design request and are available in a variety of shapes and sizes. Windows placed on the back of the envelope typically require additional discussion with your sales representative.



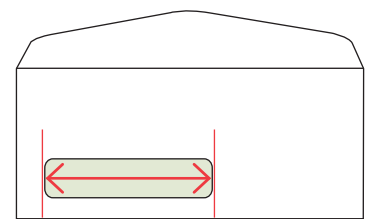
1 Orientate the FLAP



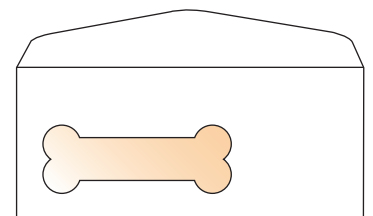
2 Measure WINDOW PLACEMENT



3 Determine WINDOW SIZE



5 Specify WINDOW DESIGN



Did you know?

ENVELOPE BASICS

EXAMPLES

ENVELOPE BASICS

STANDARD ENVELOPE SIZES



BUSINESS



BUSINESS WINDOW



BOOKLET



BOOKLET WINDOW



CATALOG



CATALOG WINDOW

BUSINESS ENVELOPE	STANDARD SIZE <i>in inches</i>	MAXIMUM ENCLOSURE SIZE <i>in inches</i>
6 1/4	3 1/2 x 6	3 1/4 x 5 3/4
6 3/4	3 5/8 x 6 1/2	3 3/8 x 6 1/4
7	3 3/4 x 6 3/4	3 1/2 x 6 1/2
8 5/8	3 5/8 x 8 5/8	3 3/8 x 8 3/8
9	3 7/8 x 8 7/8	3 5/8 x 8 5/8
10	4 1/8 x 9 1/2	3 7/8 x 9 1/4
11	4 1/2 x 10 3/8	4 1/4 x 10 1/8
12	4 3/4 x 11	4 1/2 x 10 3/4
14	5 x 11 1/2	4 3/4 x 11 1/4

BOOKLET ENVELOPE	STANDARD SIZE <i>in inches</i>	MAXIMUM ENCLOSURE SIZE <i>in inches</i>
6	5 3/4 x 8 7/8	5 1/2 x 8 5/8
6 1/2	6 x 9	5 3/4 x 8 3/4
6 5/8	6 x 9 1/2	5 3/4 x 9 1/4
9	8 3/4 x 11 1/2	8 1/2 x 11 1/4
9 1/2	9 x 12	8 3/4 x 11 3/4
10	9 1/2 x 12 5/8	9 1/4 x 12 3/8

CATALOG ENVELOPE	STANDARD SIZE <i>in inches</i>	MAXIMUM ENCLOSURE SIZE <i>in inches</i>
6 x 9	6 x 9	5 3/4 x 8 3/4
9 x 12	9 x 12	8 3/4 x 11 3/4
10 x 13	10 x 13	9 3/4 x 12 3/4

* Standard sizes listed for illustrative purposes. We rely on your explicit instructions to deliver accurate, final specifications.

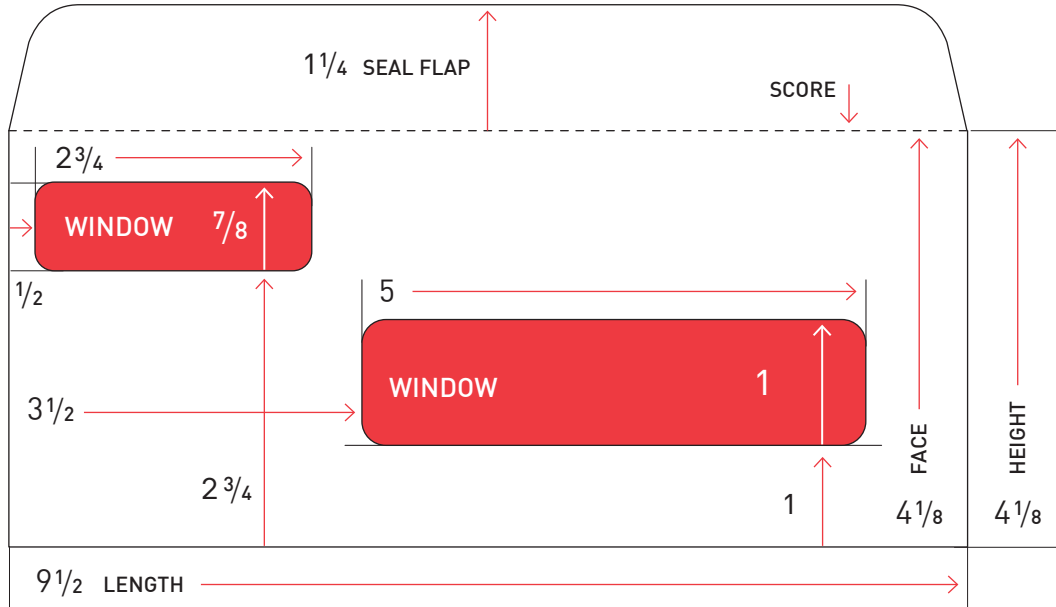
ENVELOPE BASICS

HOW TO MEASURE #10 BUSINESS ENVELOPE

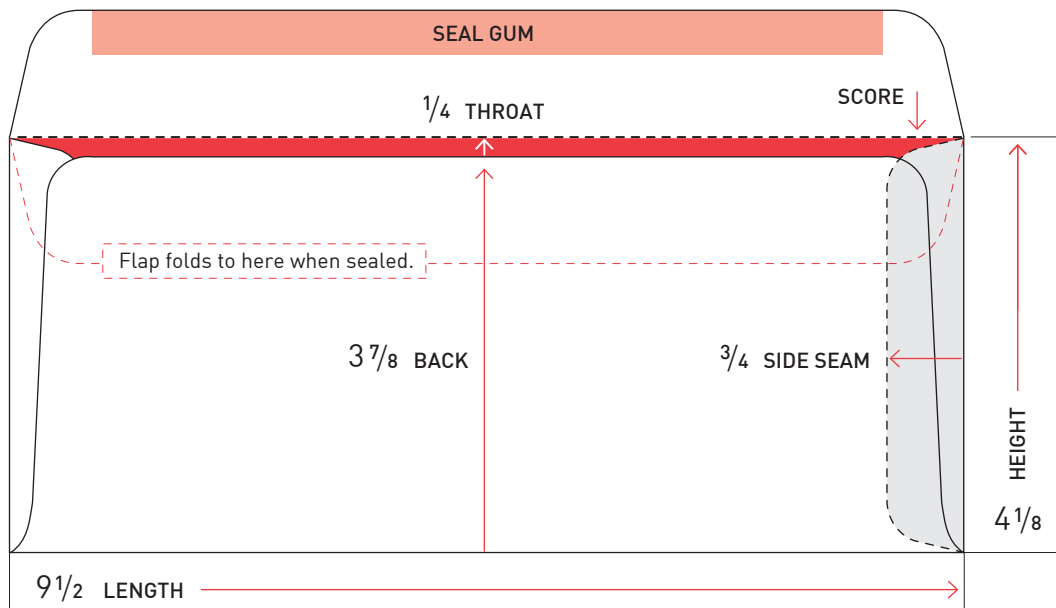
ALL MEASURED ELEMENTS

OPEN SIDE 4 1/8" x 9 1/2" *not actual size*

See page 27 for a sample order request.



FACE - NON-INSERTABLE SIDE - open side, double side seam



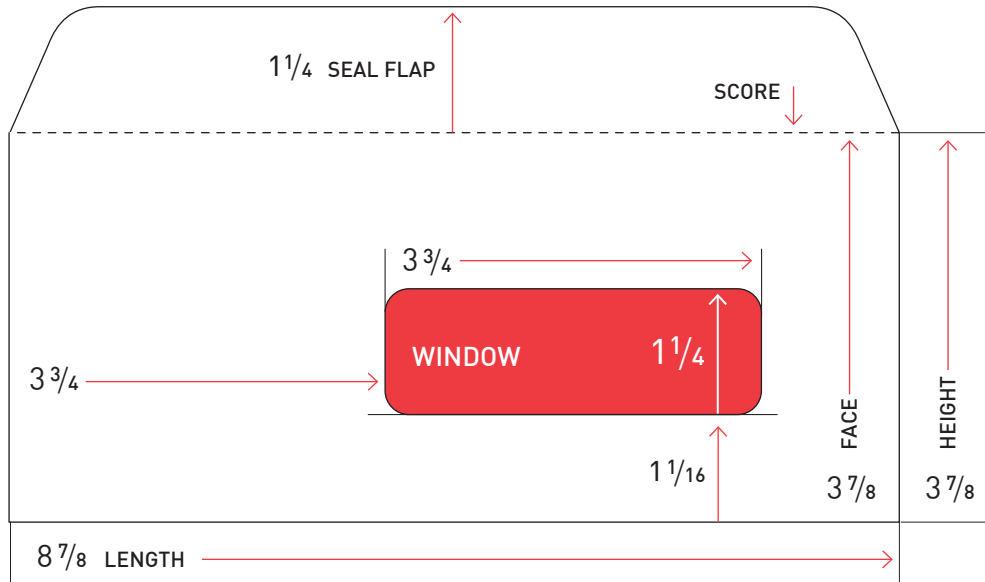
BACK - INSERTABLE SIDE - open side, double side seam

ENVELOPE BASICS

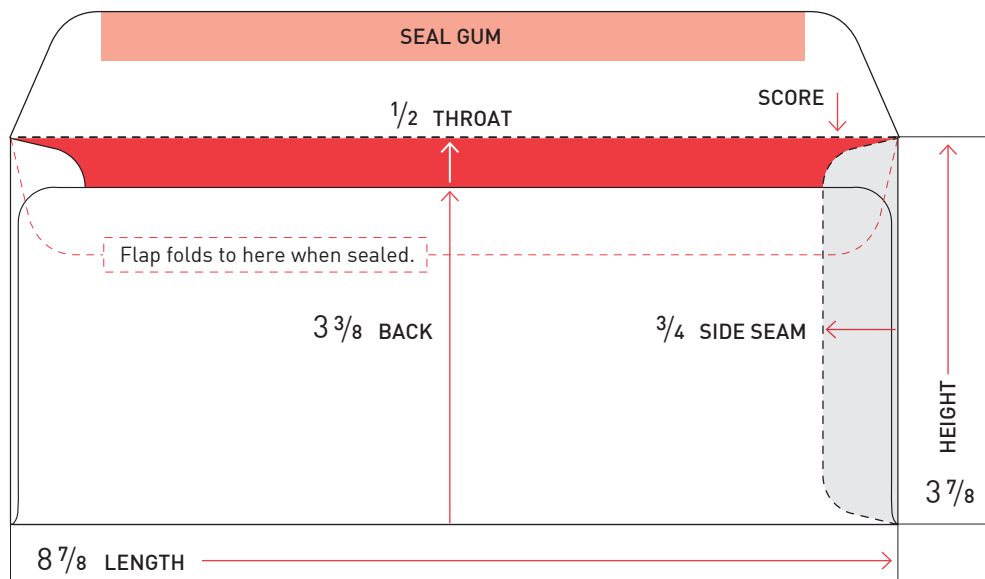
HOW TO MEASURE #9 BUSINESS ENVELOPE

ALL MEASURED ELEMENTS

OPEN SIDE $3\frac{7}{8}" \times 8\frac{7}{8}"$ *not actual size*



FACE - NON-INSERTABLE SIDE - open side, double side seam



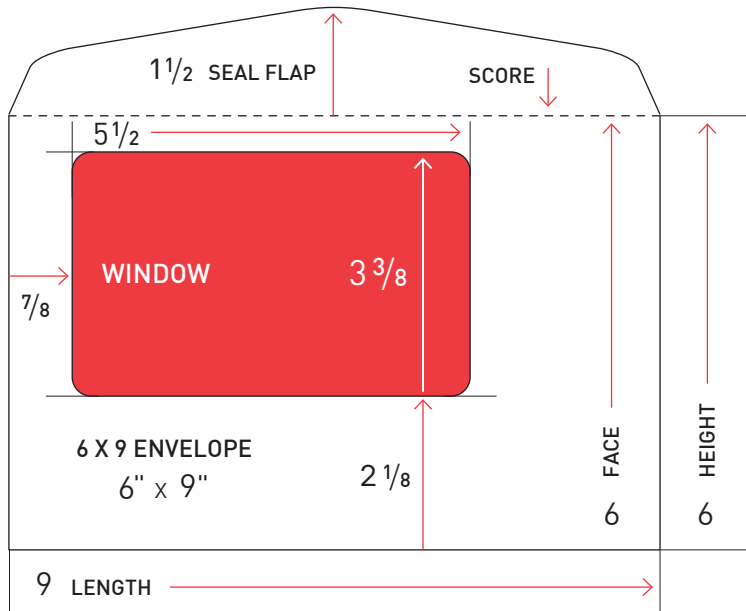
BACK - INSERTABLE SIDE - open side, double side seam

ENVELOPE BASICS

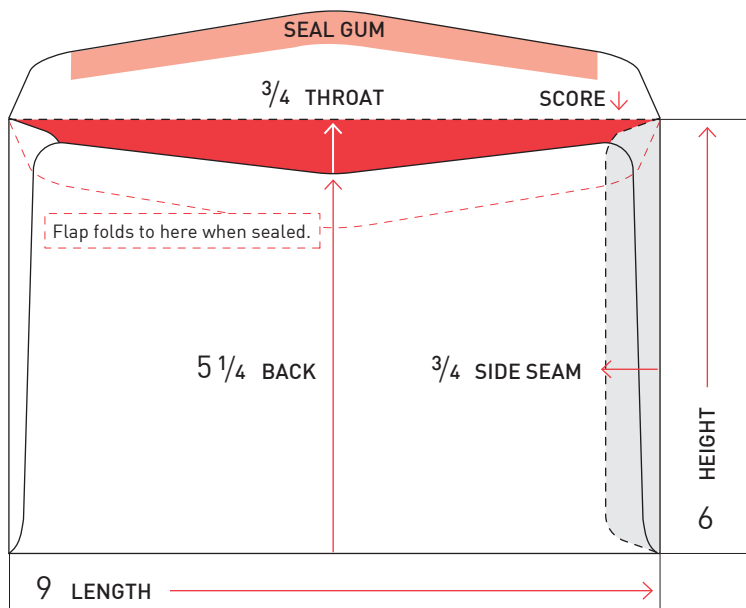
HOW TO MEASURE #6 1/2 BOOKLET ENVELOPE

ALL MEASURED ELEMENTS

OPEN SIDE 6" x 9" *not actual size*



FACE - NON-INSERTABLE SIDE - open side, double side seam



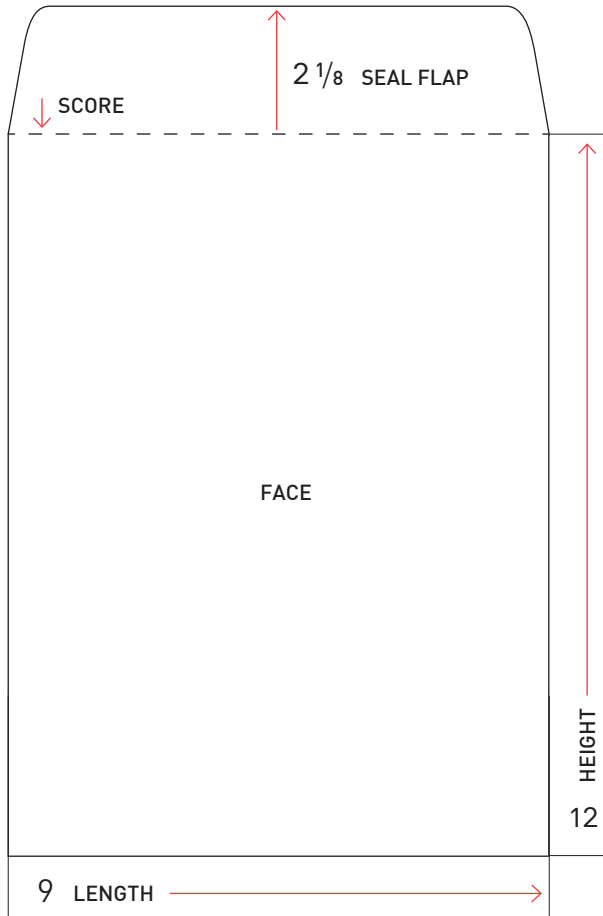
BACK - INSERTABLE SIDE - open side, double side seam

ENVELOPE BASICS

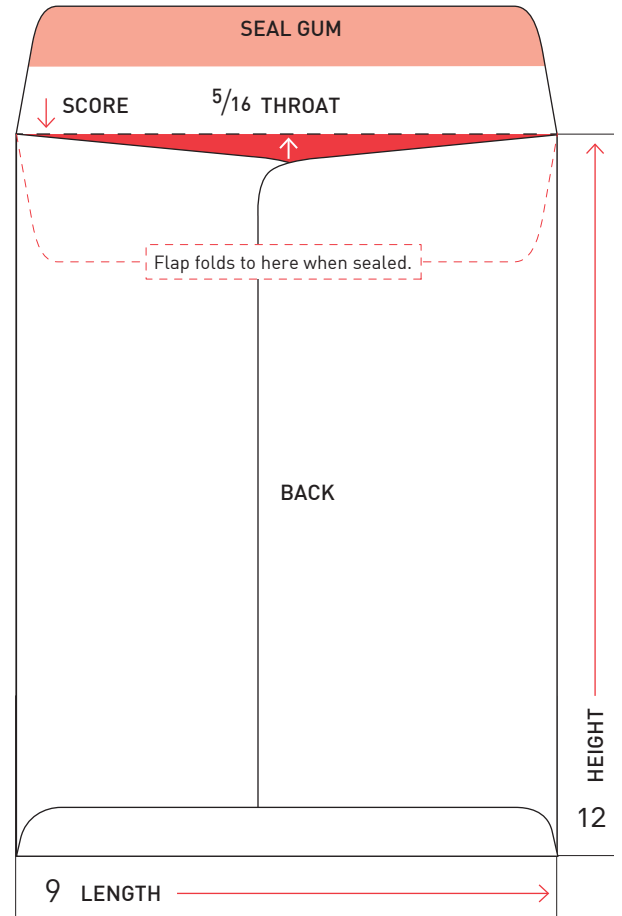
HOW TO MEASURE 9 X 12 CATALOG ENVELOPE

ALL MEASURED ELEMENTS

OPEN END 9" x 12" *not actual size*



FACE - NON-INSERTABLE SIDE - open end, center seam



BACK - INSERTABLE SIDE - open end, center seam

BACK FLAP DIMENSIONS ARE STANDARD ON CATALOG ENVELOPES, UNLESS A CUSTOM SIZE IS REQUESTED.

Did you know?

ENVELOPE BASICS

ORDERING

ENVELOPE BASICS

MAILING

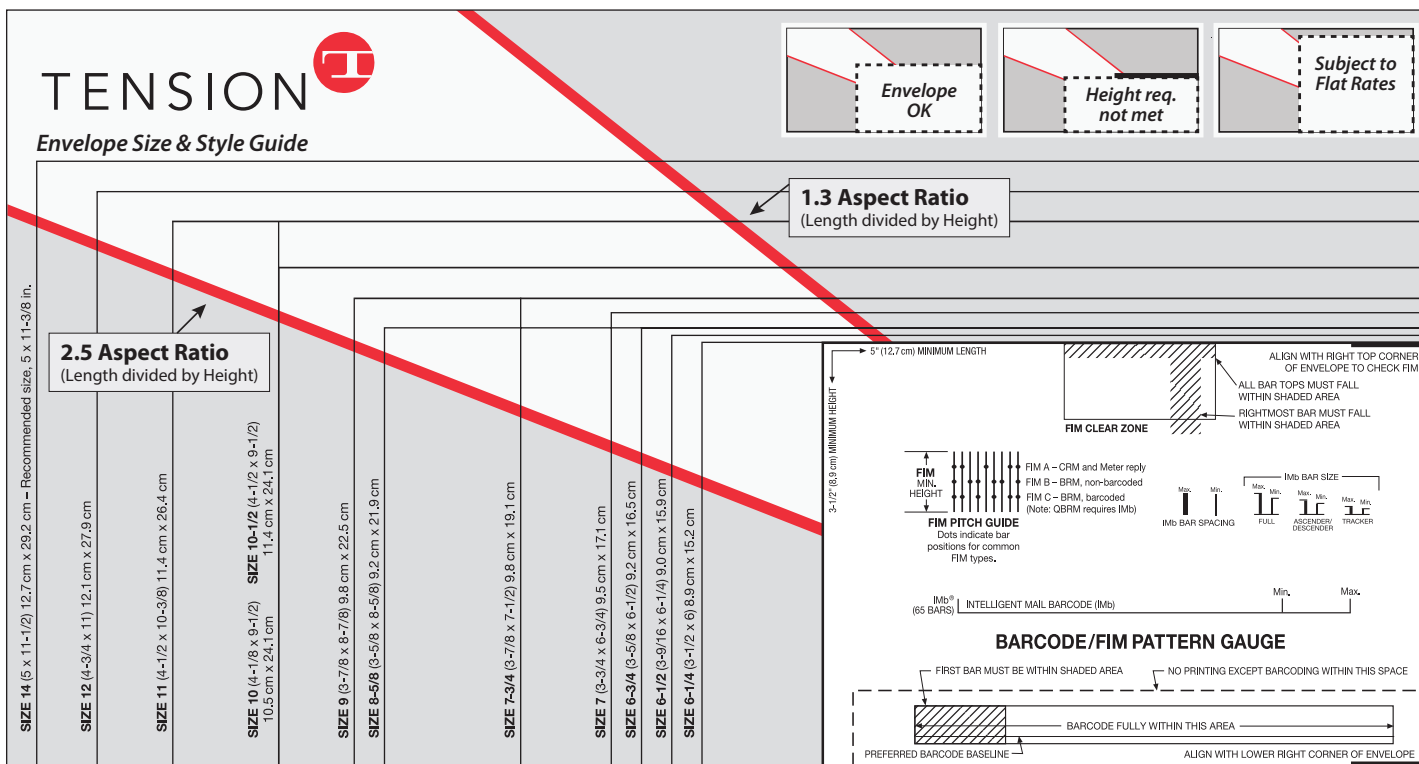
QUALIFYING FOR AN AUTOMATION RATE

Classifications are based on how efficiently mailpieces can be processed on USPS equipment. The Postal Service classifies envelopes into one of three categories: machinable, nonmachinable and automation. To be eligible for USPS machine automation rates, envelopes must meet the following criteria:

- Minimum of 3 1/2 x 5 inches
- Maximum of 6 1/8 x 11 1/2 inches
- Maximum thickness is 1/4 inch
- Aspect ratio [length (*the dimension that is parallel to the address*) divided by height] fall between 1.3 to 1 and 2.5 to 1

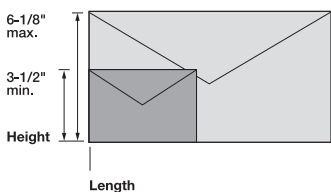
This template is for general reference only, not actual size.

For more complete information on basic mail configuration, see the USPS Quick Service Guides at <http://pe.usps.gov/text/qsg300/q000.htm>.



USPS SIZE RULES *Be sure to check with the USPS for the most current size specifications.*

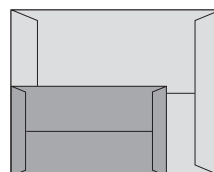
LETTER DIMENSIONS



	Minimum	Maximum
Length	5 inches	11-1/2 inches
Height	3-1/2 inches	6-1/8 inches
Thickness	0.009 inch for pieces over 6 inches	1/4 inch

FLAT DIMENSIONS

Mail classified as a Flat is subject to a different, higher set of postal rates.



	Minimum*	Maximum
Length	11-1/2 inches	15 inches
Height	6-1/8 inches	12 inches
Thickness	1/4 inch	3/4 inch

* Flats exceed at least one of these dimensions

Did you know?

ENVELOPE BASICS

TERMS

ENVELOPE BASICS

TERMS

Aspect Ratio

A USPS® term for describing the length of the envelope divided by the height, where length is the dimension that is parallel to the address.

Augmented Reality (AR) Code

AR code is a live direct or indirect view of a physical, real-world environment in which elements are augmented (or supplemented) by computer-generated sensory input such as sound, video, graphics or GPS data.

Back

Insertable side of an envelope.

Bangtail Envelope

Open side envelope with a perforated piece of paper attached to the top of back panel.

Bankers Flap

A longer, bowed or contoured flap that contributes to the elegance of a bank envelope.

Baronial / Announcement Envelope

Envelope with a pointed v-shaped flap and deep throat on the envelope, used primarily for cards and formal invitations.

Basis Weight

Paper expressed in terms of mass (expressed as weight) per number of sheets. Conventionally measured as the weight of pounds in a ream of 500 sheets.

Blank

The die cut paper in the form of an envelope prior to folding.

Blank Converting Press

An envelope folding press that uses die cut paper in the form of an envelope that is folded and glued.

Bleed

The spreading or migration of an ink component into an unwanted area. Bleed also refers to documents that have images that touch the edge of a page. A document with bleeds must be trimmed down after printing.

Blind Embossing

A design that is stamped without ink or foil and yields a raised effect in text or an image.

Booklet Envelope

An open side, double side seam envelope, usually with a wallet-style flap. This envelope comes in many standard sizes.

Bottom Flap

The flap that seals the bottom portion of an open end catalog envelope.

Bright White

Papers with a brightness level of 92 or above.

Calendarized Paper

A type of paper with a smooth, "hard" finish. Ideal for heavy ink designs and 4-color image processes.

Catalog Envelope

An open end center seam envelope with the seal flap on the short dimension.

Center Seam

The permanent seam that joins the two side flaps together at the center of the envelope, running from the bottom of the envelope to the throat of the envelope. Most commonly seen on an open end envelope.

Central Impression Print Cylinder

A single cylinder that supports the paper as it contacts adjacent digital printing plates, yielding tighter print registration, finer screens and print resolution. They are used in multi-color, Enhanced Flexography printing presses for more elaborate, high quality images.

Clasp

A type of closure secured to the back side of the envelope with a small reinforced hole punched in the flap to join and secure the clasp in place.

Closed Face

An envelope with no window. Also called a *Regular Envelope*.

Closure

Methods of securing the seal flap to the back of the envelope.

Coated Paper

A paper coated with clay or other white pigments and a suitable binder to produce a smooth glossy or matte finish.

Coating

A finish or covering that is printed on paper to provide a protective finish or to add a creative touch.

Coin Envelope

A small open end envelope ranging in size from a #00 - 1 1/16" x 2 3/4" to a #7 - 3 1/2" x 6 1/2".

Commercial Envelope

Open side envelope with a commercial-style flap. Sometimes referred to as an "official" envelope.

Commercial Flap

A common bowed or contoured flap with angled shoulders and a scooped throat.

Diagonal Side Seam

A seam running diagonally across the back of the envelope.

Die

A special tool used in manufacturing to cut or shape material.

Die Cutting

The process of using specialty dies to cut and create envelope blanks.

Digital Printing Plates

Digital printing plates allow for better, tighter print registration and finer screens.

Double Score

An additional score line placed 1/8" to 1/4" down from the regular seal flap to allow the envelope for thicker contents.

Double Side Seam

A type of seam on an open side envelope where the seams tuck underneath the back panel.

Dyes

Coloring materials that are soluble in an ink vehicle.

Enhanced Flexography

A style of printing typically used to print 4-color process (CMYK) imagery with a central impression print cylinder for tighter print registration and digital printing plates for finer screens and print resolution on calendarized papers.

Envelope with Foil

An envelope with foil is a specialty product that features both spot and full coverage layers of shiny, aluminum on the envelope. In direct mail applications, spot foil coverage is often used for logos or to highlight special offers while full foil coverage is to enhance the entire look of the mailpiece.

Expansion Envelope

An envelope with gussets that allow it to expand to hold things like books, binders, manuscripts and other bulky items.

ENVELOPE BASICS

TERMS *continued*

Expansion Score

A prepared line on the side seam of an Expansion Envelope to allow it to hold more content.

Face

The address, or non-insertable, side of an envelope.

Fades

An image in which the tones gradually fade away until they blend in with the background they are printed on. *Also called vignettes.*

Filmview

A polystyrene window film and most common, cost-effective envelope window patch. It is postal approved and can be recycled.

Finish

Surface of any grade of paper. Can be a high finish (e.g. gloss, smooth).

Flexographic Printing

Method of direct rotary printing using raised image printing plates, affixed to plate cylinders, inked by an anilox roll or doctor-blade-wiped engraved metal roll, carrying fluid inks to substrates.

Foil Liner

A metallic-colored lining placed on the inner part of the flap.

Fold

Any folded edge of the envelope. Generally called a side, top or bottom fold.

Four-Color Process or 4-Color Process

Also referred to as CMYK color process, uses four different color inks (e.g. Cyan, Magenta, Yellow and Black) that overlap each other to achieve the full color spectrum. The same four color inks are used to print any multicolor image.

Glassine

Transparent, highly hydrated paper made from wood products that is used for windows.

Gloss

Ability of a surface to reflect light.

Grain Direction

The direction of the majority of fibers in a sheet of paper.

Indicia

Imprinted areas on mailpieces representing a method of payment in replacement of a stamp.

Inserting Machine

Equipment that automates the process of stuffing envelopes with contents.

Involvement Devices

An engaging envelope feature that can help increase customer attention and response.

Kraft Paper

Paper with longer and stronger fibers than wove paper, but does not print as well. Available in plain colors and in brown stock.

Lacquer or Varnish

Coatings over printing to protect the print and increase gloss.

Latex Gum

Latex gum is a pressure-sensitive gum applied along the edge of the flap and/or the upper part of the back of the envelope that creates a self-sealing envelope. It has a limited shelf life. *Also called Self-adhesive Gum.*

Liner

A paper or foil covering placed on the inside of an envelope.

Machine Press

A printing press that is native to the envelope converting machine.

Metallic Ink

Ink that uses metallic powders, such as aluminum and bronze, mixed with a proper varnish to produce print images with metallic luster.

Metallic Paper

Paper that is covered with an aluminum layer that provides shine, gloss and an attractive metal look. Metallic paper is available in various colors, finishes (e.g. holographic), recyclable and printable (i.e. offset lithography or flexography) for direct mail applications.

Matte Finish

A semi-gloss paper finish.

Offset Lithography / Offset Printing

An indirect style of printing that produces high-quality prints. Ideal for photographs, halftones and fine screens.

Open End

An envelope with an opening on the shorter dimension.

Open Face / Open Panel

An envelope with a window opening that does not have any type of window film covering the opening.

Open Side

An envelope with an opening on the longer dimension.

Outside Side Seam

A side seam that is gummed on the outside of the envelope.

Pantone® Matching System (PMS)

PMS is a color matching system for selecting ink colors for coated and uncoated papers.

Patch Gum

Adhesive that adheres to the window patch.

Policy Envelope

An open end envelope with the same dimensions as a #10 through #14 commercial envelope.

Polymer Plates

Flexible, direct impression printing plates that are attached to rollers on the envelope machine. Modern polymer plates are thin, yielding crisp imaging and precise registration control.

Polystyrene

A translucent envelope window made from petroleum-based products. Filmview and trycite are two types of polystyrene window film.

Post-Consumer Content

The percentage of recycling materials that have been collected from schools, offices and homes and used by the consumer. The content is deinked and repulped for use in the papermaking process.

QR Code

A code consisting of an array of squares that can be scanned and machine read. QR codes are typically used for storing URLs and other information for reading after scanned by a smartphone camera.

Radiation Ink

A type of ink developed to dry instantly. Must be properly handled due to its potential dermal toxicological effects. Ultraviolet ink (UV) and electronic beam (EB) ink are types of radiation inks.

ENVELOPE BASICS

TERMS *continued*

Recycled Paper

Paper that contains fibers from previously manufactured paper that has been processed back to pulp again. Recycled paper may or may not contain post-consumer content.

Registration

The method of correlating overlapping colors on one single image.

Regular Envelope

An envelope with no window.
Also called Closed Face.

Remittance Envelope

A booklet or side seam style envelope with a deep wallet flap covering most of the back of the envelope.

Remoistenable Gum

A water-soluble adhesive. The most common type of envelope seal.

Score

A prepared line on paper that helps it to fold cleanly.

Seal Flap

The area above the score that folds to close the envelope.

Seal Gum

An adhesive applied to the flap of the envelope in order to create a seal.

Security Tint

Patterned, opaque printing on the inside of an envelope for added security.

Self-adhesive Gum

Latex gum is a pressure-sensitive gum applied along the edge of the flap and/or the upper part of the back of the envelope that creates a self-sealing envelope. It has a limited shelf life.
Also called Latex Gum.

Shoulder

The top edge of the inner side seams of the envelope.

Side Seam

A seam that seals the insertable or back side of the envelope when folded. Side seams can be diagonal or perpendicular to the envelope opening.
See Double Side Seam.

Specialty Paper

Papers that are available in a variety of colors, finishes, textures and weights.

Spot Colors

Colors generated by an ink (pure or mixed) that is printed in a single run without screens or dots.

Square Flap

A type of flap with a straight edge along the bottom. The most common type of flap.
Also called Straight Flap.

Stacked Press

One or more stacks of printing stations arranged vertically on either side of the press frame. Each stack has its own polymer plate cylinder which prints one color of a multicolor impression.

Straight Flap

A type of flap with a straight edge along the bottom. The most common type of flap.
Also called Square Flap.

String and Button

A type of envelope closure that has two round disks riveted to the seal flap and body of the envelope. The two disks are joined by a string twisted in a figure eight.
Also called a Tension Tie closure.

Substance Weight

See Basis Weight.

Surface Enhanced White Wove Paper

This is also known as calendarized or super calendarized paper. It features a "hard", smoother finish and is ideal for heavy ink designs and 4-color processes.

Tear-resistant Paper

Paper that is near indestructible and will not tear in typical applications.

Tension Tie

A type of envelope closure that has two round disks riveted to the seal flap and body of the envelope. The two disks are joined by a string twisted in a figure eight.
Also called a String and Button closure.

Throat

Opening at the top of an envelope. The size of the throat is measured from the top edge to the bottom flap to the fold line of the seal flap.

Trapping

In multi-color print jobs, the overlapping of one color over a different, adjacent color to ensure no white space is visible.

Trycite

A highly reflective, glossy material that is more brittle and prone to scratches. Sometimes the shine or gloss is too reflective for postal system sorting.

Tyvek®

An ultra-lightweight, synthetic paper that is tear resistant and water resistant. When converted on a folding machine, Tyvek envelopes can be used for heavy, bulky and confidential mailings.

Ultraviolet (UV) Ink

A type of radiation ink that consists of pigments dispersed in liquid prepolymers, monomers and initiators that release free radicals which instantly polymerize the ink to a dry, tough thermosetting resin on exposure to intensive UV radiation. The active ingredients in UV inks are more costly than solvents used in conventional inks, and UV inks can be up to three times more expensive than regular inks.

Vignettes

An image in which the tones gradually fade away until they blend in with the background they are printed on. *Also called fades.*

Wallet Flap

A straight, deep flap with a wide gummed area. Offers reliable document protection.

Web Converting Press

An envelope folding press that uses continuous rolls of paper that is cut into single envelope forms, folded and glued.

Window

The open area of an envelope that allows the USPS® and the recipient to read the address or other information.

Window Patch

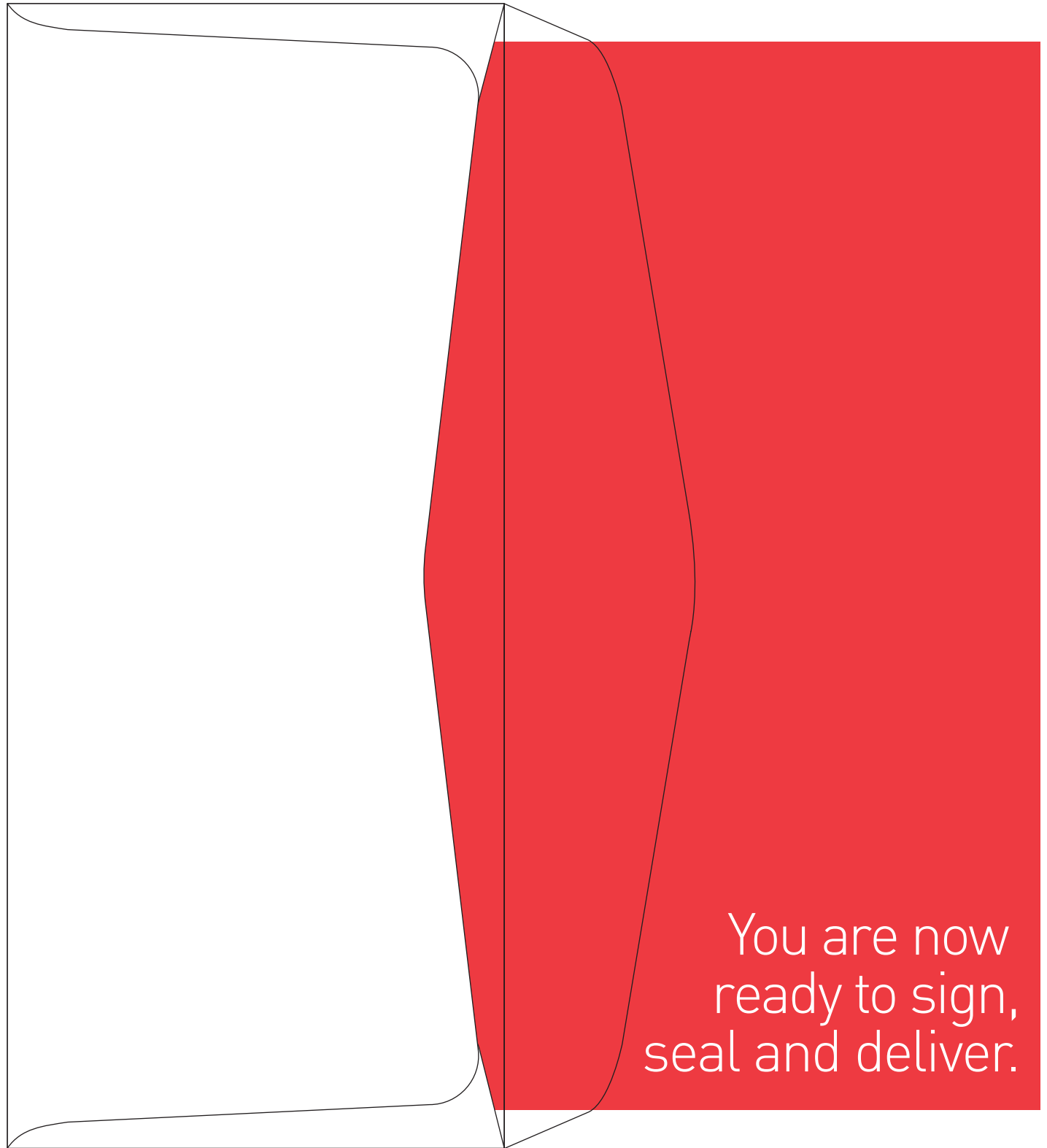
The transparent film that covers a window opening on an envelope.

Wove Paper

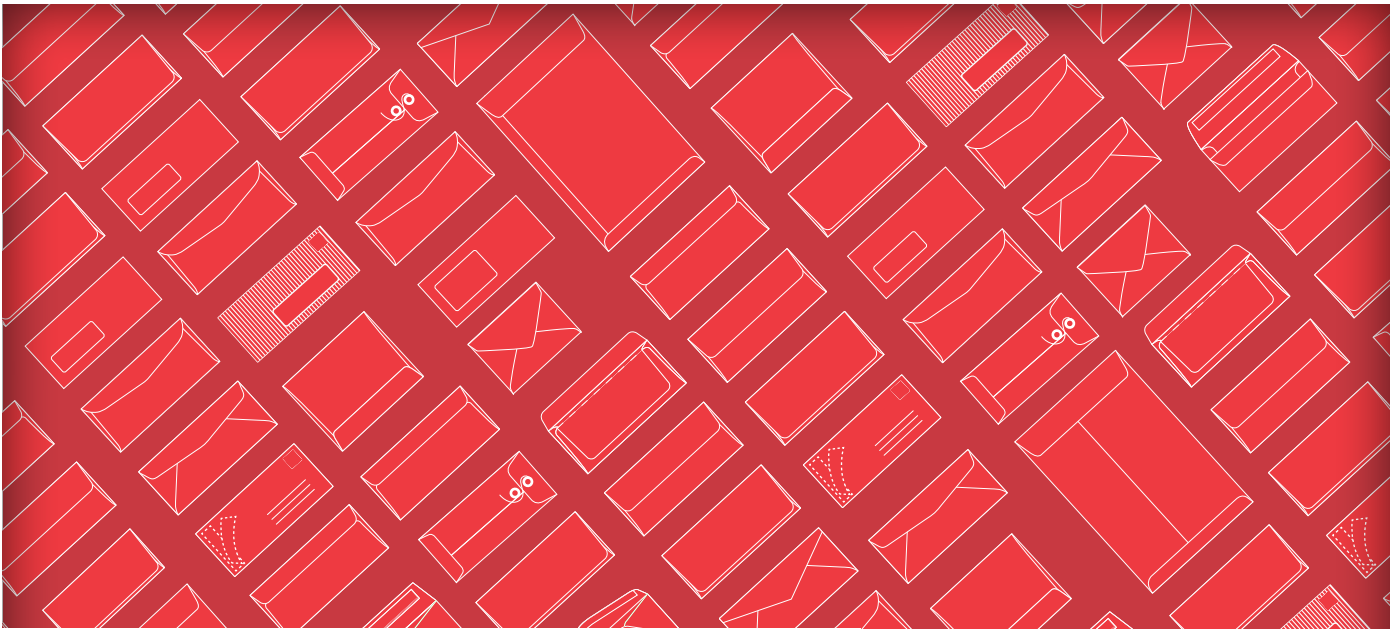
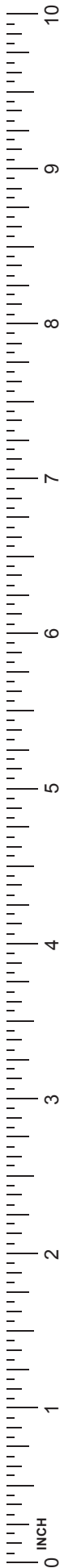
Paper with short fibers and a soft, smooth surface. Available in multiple weights and colors, this paper prints well.

ENVELOPE BASICS

FINAL STEP



You are now
ready to sign,
seal and deliver.



**Alexander Clark
Printing**
An Employee Owned Company

