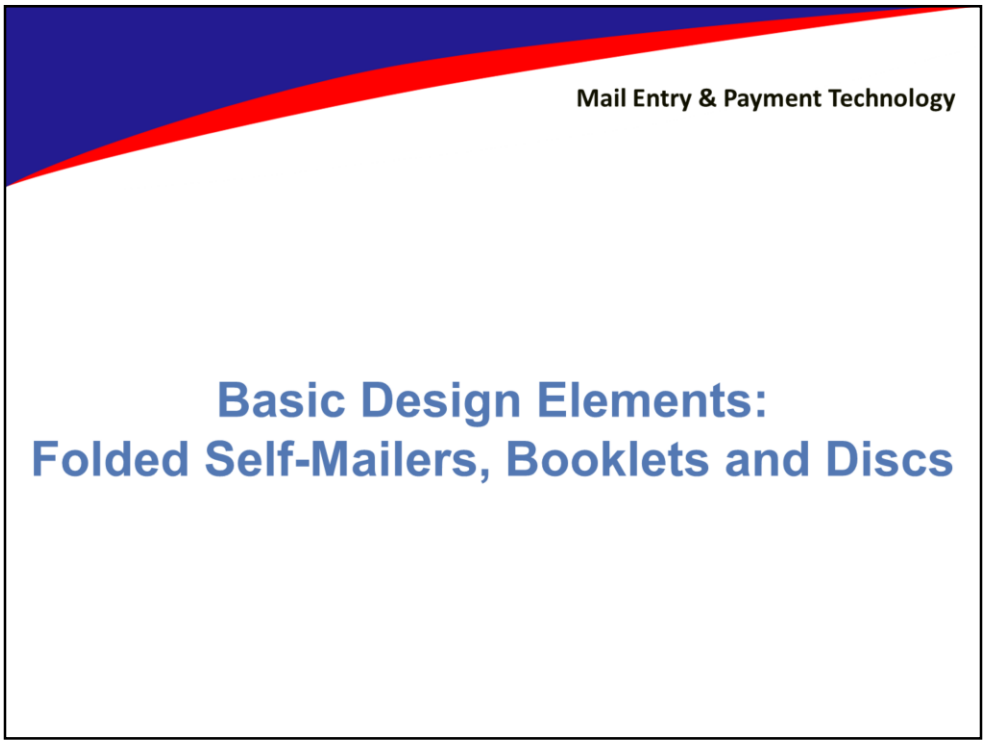
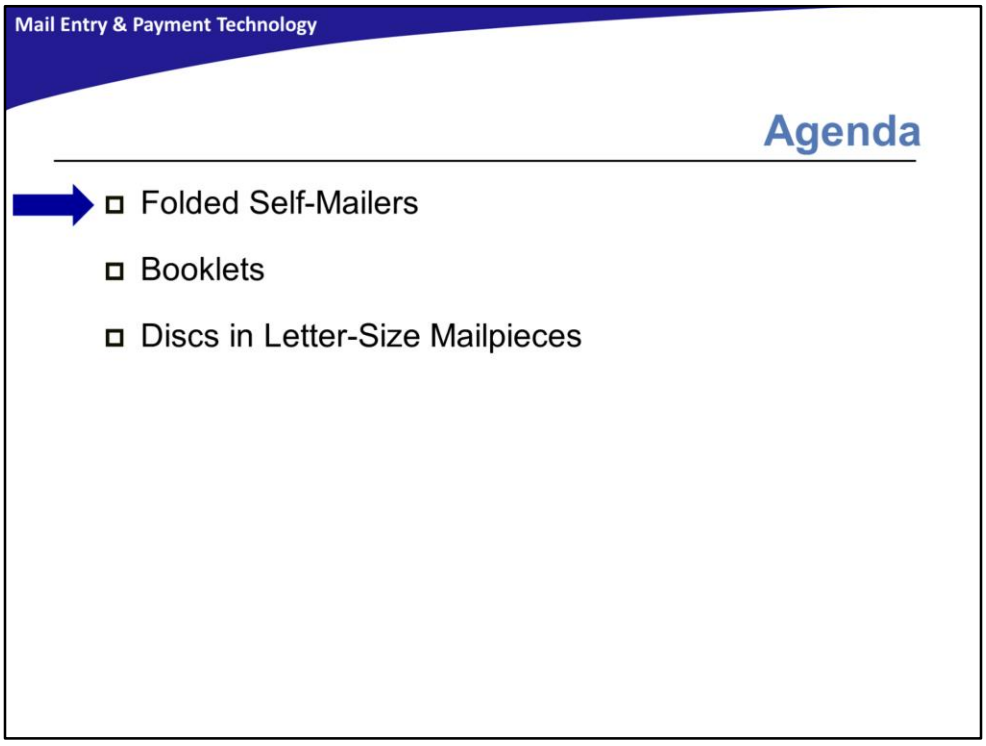



Welcome to the training course, Basic Design Elements for Folded Self-Mailers, Booklets & Discs.




The Agenda for this training will cover the following:

- Folded Self-Mailers
- Booklets
- Discs in Letter-Size Mailpieces

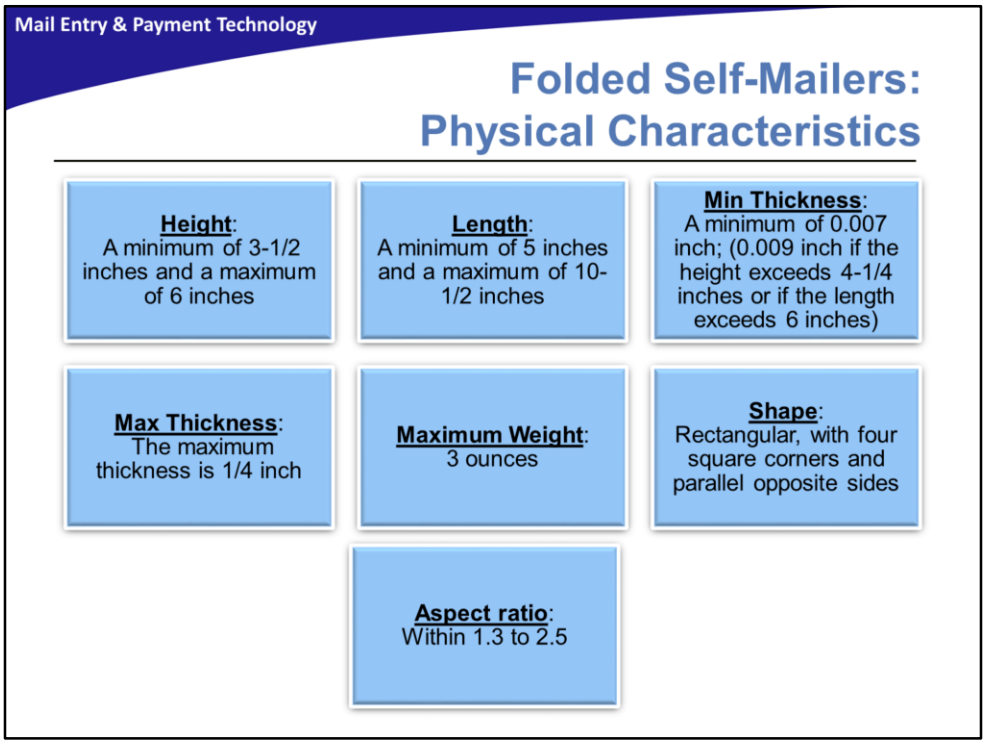
We will begin by analyzing Folded Self-Mailers.

## Folded Self-Mailer: Defined

### What is a Folded-Self Mailer?

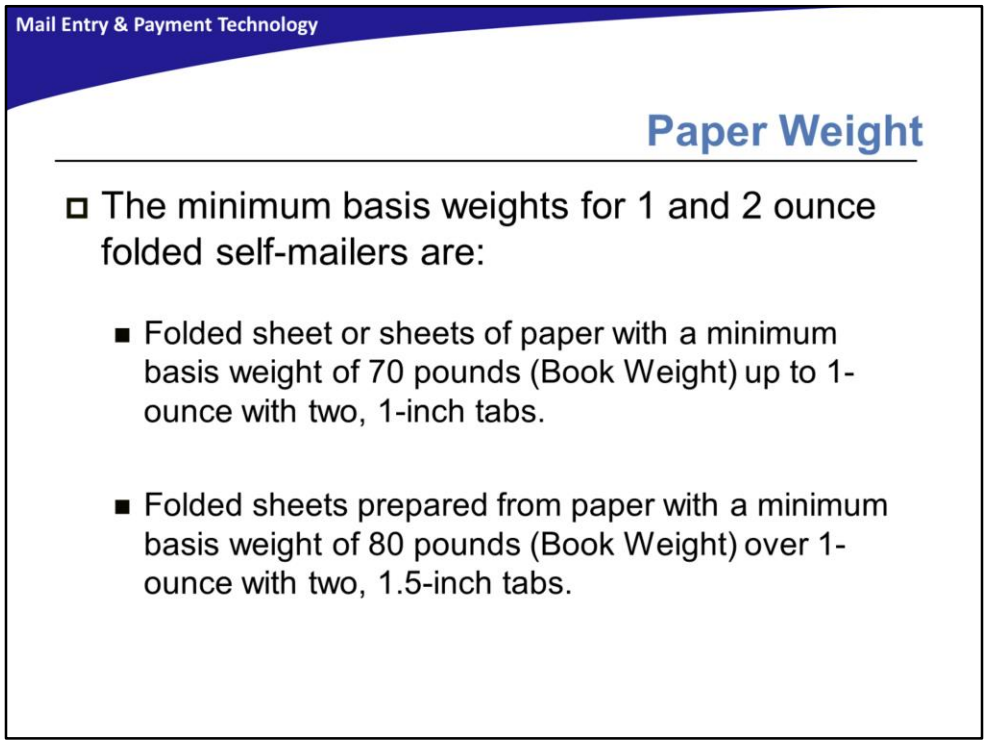
- A letter-size mailpiece formed by two or more panels that are created when one or more unbound sheets of paper are folded together and sealed.

A folded self-mailer is formed by two or more panels that are created when one or more unbound sheets of paper are folded together and sealed to make a letter-size mailpiece. The number of panels is determined by the number of sheets in the mailpiece and the number of times the sheets are folded.




Folded self-mailers have the following characteristics:

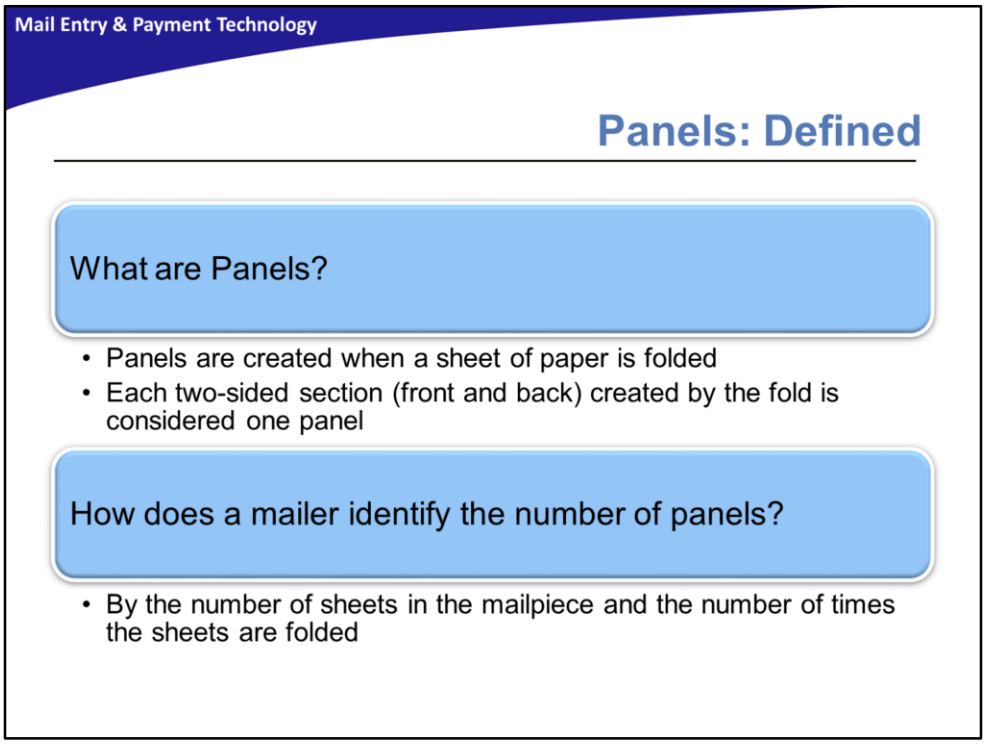
A height that falls within a minimum of 3-1/2 inches and a maximum of 6 inches.
A length that falls within a minimum of 5 inches and a maximum of 10-1/2 inches.
Thickness of a minimum of 0.007 inch. This minimum thickness requirement is 0.009 inch if the height exceeds 4-1/4 inches or if the length exceeds 6 inches.
The maximum thickness for a folded self-mailer is 1/4 inch.
Its maximum weight is 3 ounces.
It will be rectangular, with four square corners and parallel opposite sides.
The aspect ratio should fall within 1.3 to 2.5.




The standards for folded self-mailers are generally based on the basis weight of the paper stock and the location of the folded or bound edge.
All folded self-mailers require two, 1-inch tabs unless otherwise specified. Oblong, quarter-fold and Newspaper Print folded self-mailers may require additional tabs. Other accepted sealing methods such as Glue-Dots or Continuous Glue-Lines may be used in lieu of tabs on certain designs.

For folded self-mailers that are single or multiple sheets at 70 pounds basis weight up to 1-ounce, the requirement is: Two, 1-inch tabs at the top.

For folded self-mailers that are multiple folded sheets at 80 pounds basis weight over 1-ounce, the requirement is: Two, 1.5-inch tabs at the top.




Panels are created when a sheet of paper is folded. Each two-sided section (front and back) created by the fold is considered one panel.

A mailer can determine the number of panels for a folded self-mailer by counting the number of sheets in the mailpiece and multiplying by the number of times the sheets are folded.

## Folded Self-Mailers: Panels

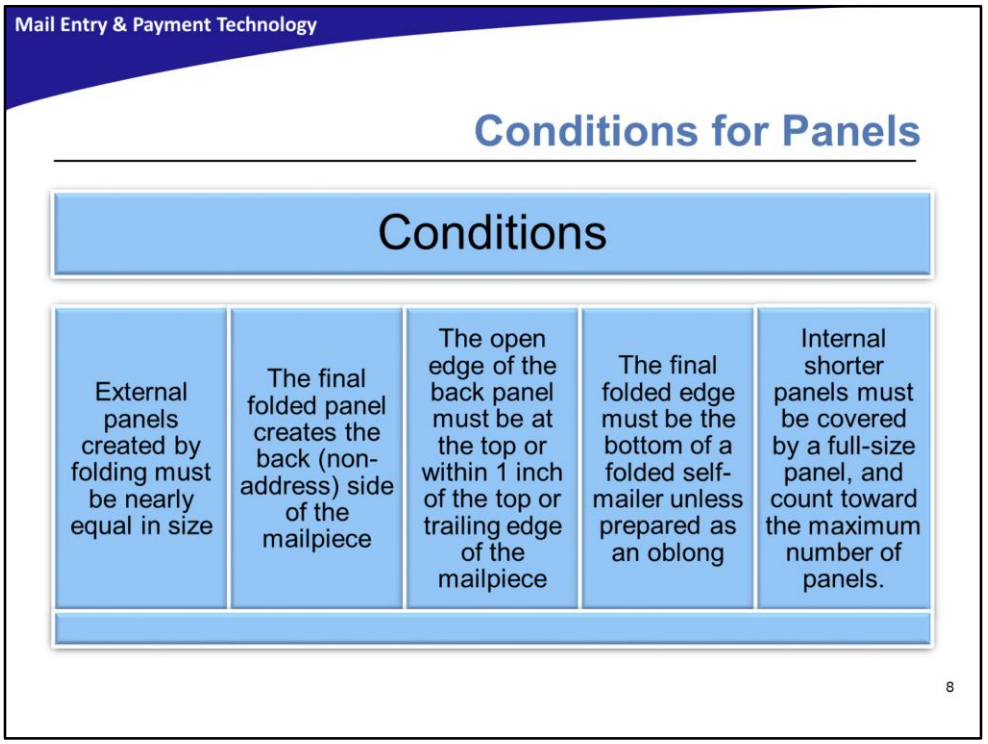
Maximum number of panels --12, except under the following circumstances:

- Quarter-folded self-mailers made of a minimum of 70-pound book grade paper may have as few as 4 panels
- Quarter-folded self-mailers made of 55 pound or greater newsprint must have at least 8 panels and may contain up to 24 panels

When designing a folded self-mailer, the maximum number of panels is 12.

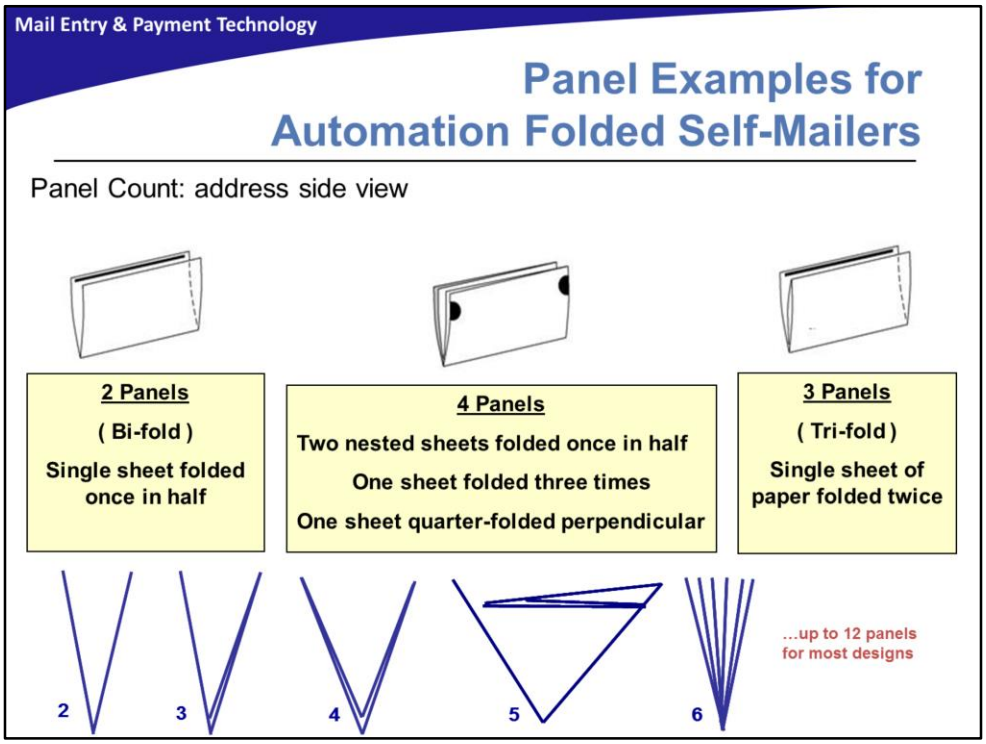
There is one exception – quarter-folded self-mailers.

Quarter-folded self-mailers made of a minimum of 70-pound book grade paper may have as few as 4 panels. Quarter-folded self-mailers made of 55 pound or greater newsprint must have at least 8 panels and may contain up to 24 panels.




There are specific parameters that a mailer must follow when designing panels. The following conditions must be considered:

1. External panels created by folding must be equal or nearly equal in size. As clarification, the non-address panel can be **no more than one inch** shorter from the top for horizontal folded pieces or from the trail edge if vertical/oblong fold style.
2. The **final folded panel** creates the back (non-address) side of the mailpiece. The open edge of the back panel must be at the top or within 1 inch of the top or trailing edge of the mailpiece. For horizontal folded tri-fold or multi-fold pieces, the addressed panel may be the final folded panel if the leading edge is sealed according to DMM section 201.3.14.4a.
3. The final folded edge must be the bottom of a folded self-mailer unless prepared as an oblong. The final folded edge of an oblong folded self-mailer must be the leading (right) edge.
4. Internal shorter panels must be covered by a full-size panel, and count toward the maximum number of panels. Optionally, internal shorter panels may be secured but must have only one edge that is shorter and be no further than one inch away from the edge of the external panel.




Folding methods and the subsequent number of panels created when folding a single sheet of paper are:

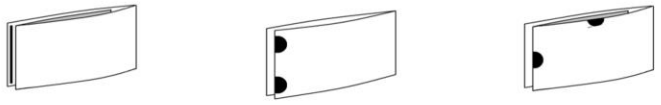
1. **Bi-fold**: folded once forming two panels.
2. **Tri-fold**: folded twice forming three panels.
3. **Oblong**: paper folded once to form two rectangular panels with one elongated dimension and parallel opposite sides. The final folded edge is on the leading (shorter) edge.
4. **Quarter-fold**: folded twice with each fold at a right angle (perpendicular) to the preceding fold. One sheet of paper quarter-folded creates four panels.

Folded Self-Mailers can be designed in a variety of acceptable forms.

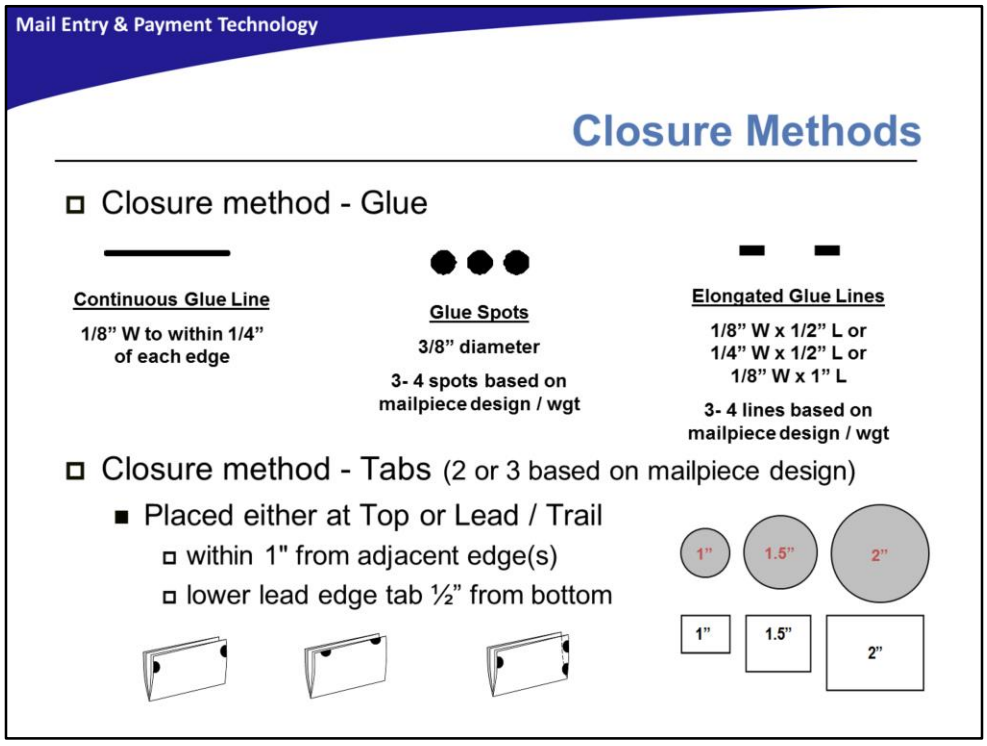
# Fold Styles for Automation Folded Self-Mailers

- Fold style / orientation: address side view
- Horizontal: final fold at bottom edge to non-address side

- Vertical: final fold on lead edge to non-address side
  - Oblong is a common name for this fold style



Automated folded self-mailers must be designed such that they can easily flow through USPS machinery. This slide shows examples of possible folded self-mailer designs. The fold style and orientation can be horizontal, with the final fold at the bottom edge to the non-address side, or vertical, with the final fold on the lead edge to the non-address side.




General Sealing Methods

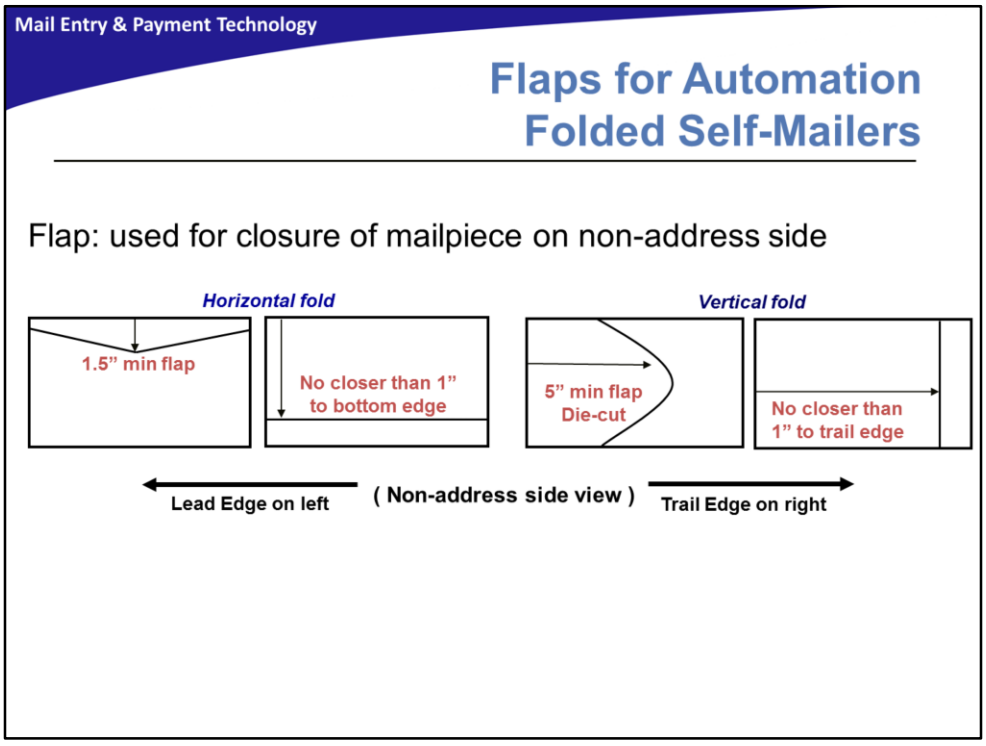
Folded self-mailers must be sealed using tabs or glue under the following conditions (also see DMM section 201.3.14.5 for specific sealing standards):

a. Tabs must meet the standards for tabs in DMM section 201.3.11. The size and number of tabs required is determined by the weight of the mailpiece and optional design elements as follows:

1. To seal folded self-mailers that weigh up to 3 ounces created in bi-fold, tri-fold formats, pieces with multiple interior folds and a final fold on the bottom, and quarter-fold mailpieces that weigh up to one ounce; place two nonperforated tabs on the top edge, one within 1 inch from the leading edge and another within 1 inch from the trailing edge, or place one tab on the leading and another on the trailing edge, both placed within 1 inch from the top. Additionally, horizontal folded tri-fold and multi-fold pieces having the final folded panel as the addressed panel must include an additional 1-inch tab (1-1/2 inch preferred) for pieces weighing up to 1 ounce; or a 1-1/2 inch tab for pieces weighing over 1 ounce, placed 1/2 inch from the bottom of the leading edge. Instead of a tab, a 3/8-inch glue spot or 1/8-inch wide glue line placed 1/2 inch from the bottom and no more than 1/4 inch from the leading edge may be used. The glue spots or lines must be adhered from the addressed panel to the internal panel when the fold is completed.
2. To seal quarter-fold mailpieces made with newsprint that weigh more than 1 ounce up to 3 ounces, affix two tabs, one on the leading edge and one on the trailing edge within 1 inch from the top, and affix a third tab on the lower leading edge 1/2 inch from the bottom (see DMM section 201.3.14.5b).
3. To seal oblong pieces that weigh up to 3 ounces, affix one tab in the center of the top edge and one tab in the center of the trailing edge (preferred) or affix both tabs on the trailing edge within 1 inch of the top and bottom edges. Tabs may not be placed on the bottom of an oblong piece.

b. Glue must be positioned within 1/4 inch of the open edges and be placed opposite the final fold or on both the leading and trailing edges when the final panel fold is on the bottom. Apply glue by one of the following methods:

1. Continuous glue lines at least 1/8 inch wide (0.125 inches).
2. Three or four glue spots at least 3/8 inch (0.375 inch) in diameter.
3. Three or four elongated glue lines. Seal folded self-mailers that weigh up to 1 ounce with lines at least 1/2 inch long. Seal folded self-mailers that weigh more than 1 ounce with elongated glue lines that are each at least 1 inch long and 1/8 inch wide, or with glue lines that are each at least 1/2 inch long and 1/4 inch wide.
4. Distribute glue spots and elongated glue lines evenly along the sealed edge(s).
5. Quarter-fold self-mailers must be sealed with tabs.

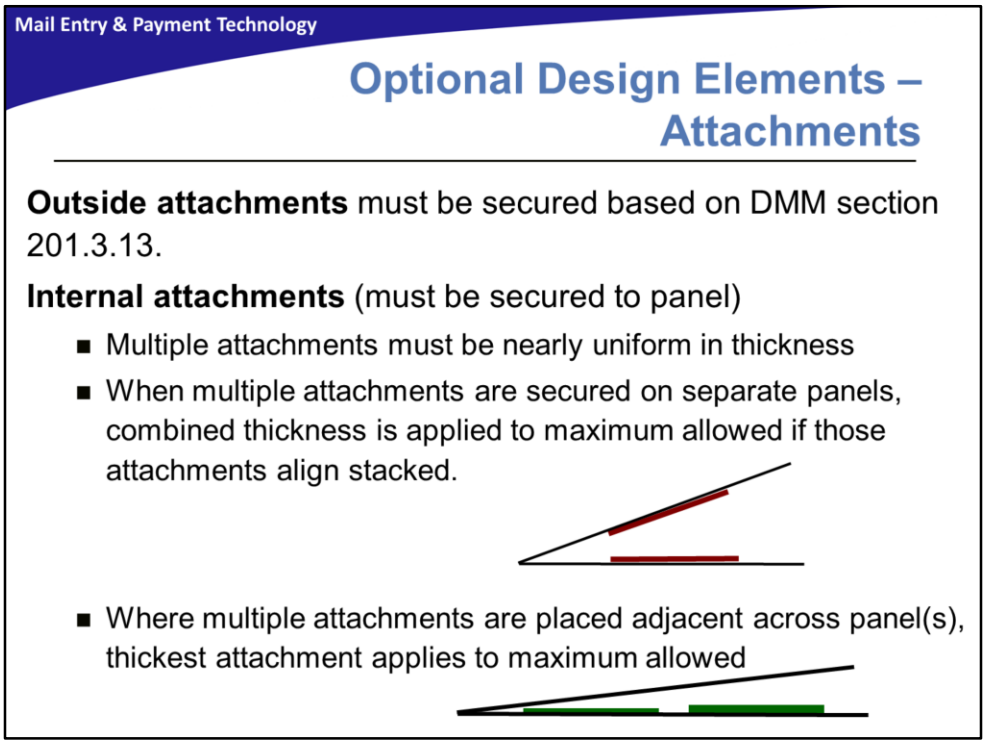



In addition to the closure methods described on the previous slide, Flaps are used for closure of the mailpiece on the non-address side.

Flaps must meet the following conditions:

1. The folded edge of a flap must be flush with the top edge of the mailpiece and end one inch or more above the bottom edge, except under DMM section 201.3.14.3f4. Flaps must be at least 1-1/2 inches when measured from the top of the mailpiece.
2. Flaps must be secured by a sealing method in DMM section 201.3.14.4.
3. Flaps with die-cut shapes must be firmly secured with tabs, glue line, glue spots or elongated glue lines. A 1/8 inch wide continuous glue line that seals the contour of the die-cut is strongly recommended.
4. Flaps on oblong pieces must be at least 5 inches long at the longest point when measured from the leading edge and must end more than one inch from the trailing edge.

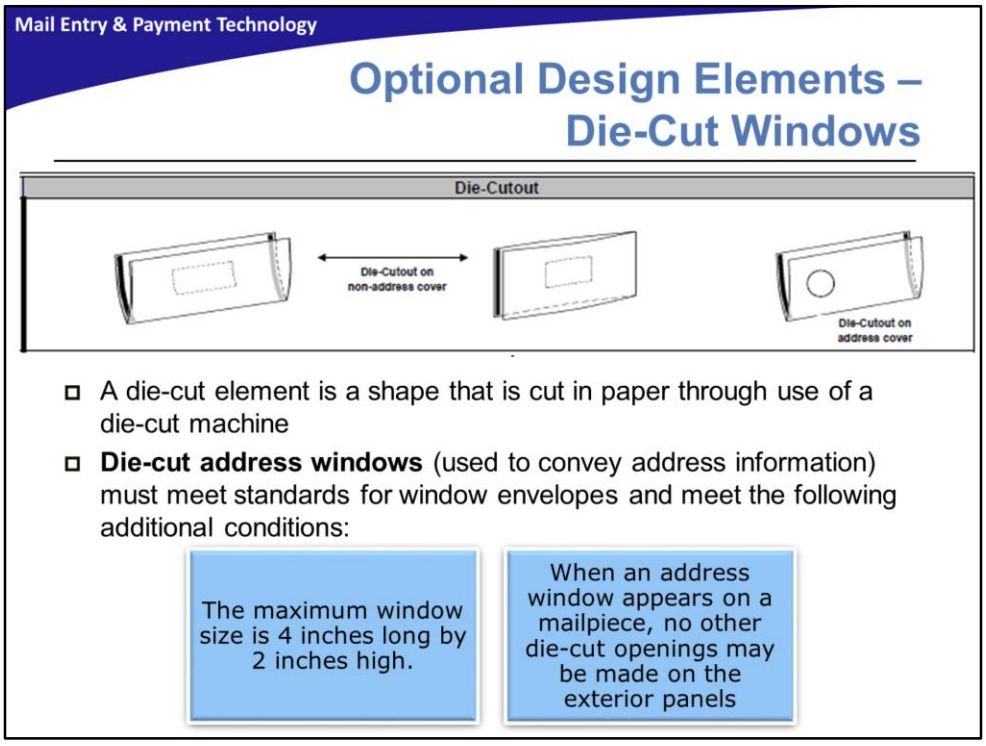
Pockets prepared within folded self-mailers to stabilize enclosures are not considered to be panels.




Attachments must be secured on the outside of a folded self-mailer under DMM section 201.3.13.

Attachments must be secured within a folded self-mailer under the following conditions:

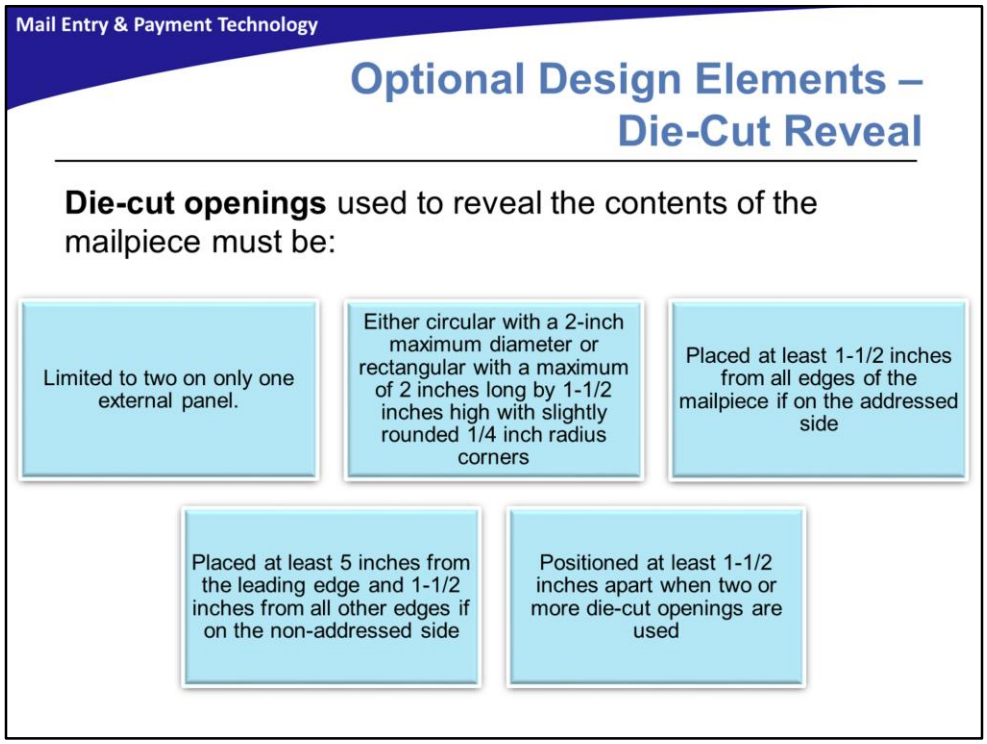
- The attachment is affixed to an inside panel and secured to it at least 1/2 inch from any edge.
- The attached material may not exceed a maximum thickness of:
  - 0.05 inch thick for mailpieces weighing up to 1 ounce.
  - 0.09 inch thick for mailpieces weighing over 1 ounce.
- Multiple attachments must be positioned so that the host mailpiece remains nearly uniform in thickness.
- When multiple attachments are affixed to separate panels in stacked alignment, the combined thickness of the attachments must be no greater than the maximum thickness in DMM section 201.3.14.9b.
- When multiple attachments are affixed adjacent to each other across the length of a mailpiece, the thickest attachment must be no greater than the maximum thickness in DMM section 201.3.14.9b.
- Folded self-mailers with die-cut openings may contain attachments if the inserted material is larger than the die-cut opening.
- Quarter-fold self-mailers may have only one internal attachment not exceeding 0.012 inch thick. The attachment must be secured at least 1/2 inch from all edges.




Along with attachments and flaps, there are other permissible variations in design for Folded Self-Mailers. One such variation involves die-cut elements. A die-cut element is a shape that is cut in paper through use of a die-cut machine . Folded self-mailers may be produced with two types of die-cut elements in the exterior panels: address windows or die-cut reveal. Die-cut openings may not be used to create die-cut punched holes, which are openings in the same location on all layers and panels that create a hole through the entire mailpiece.

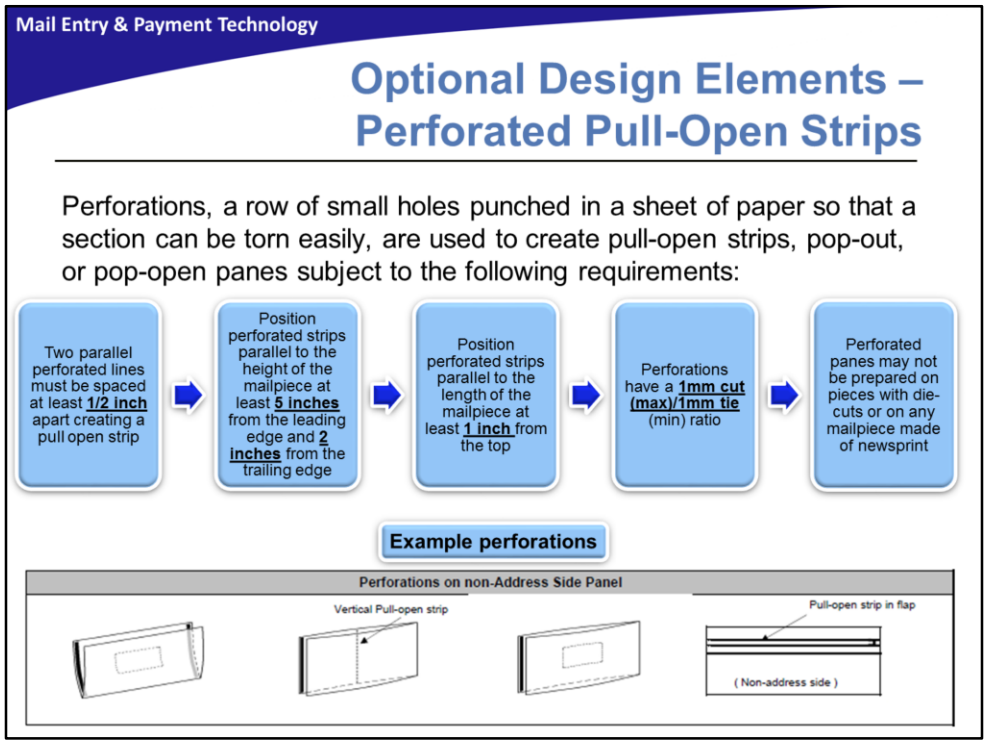
Die-cut address windows (used to convey address information) must meet standards for window envelopes under DMM section 601.6.4 and meet the following additional conditions:

1. The maximum window size is 4 inches long by 2 inches high.
2. When an address window appears on a mailpiece, no other die-cut openings may be made on the exterior panels.




The second die-cut option is the die-cut reveal, which shows the contents of a mailpiece. Die-cut reveal mailpieces must be:

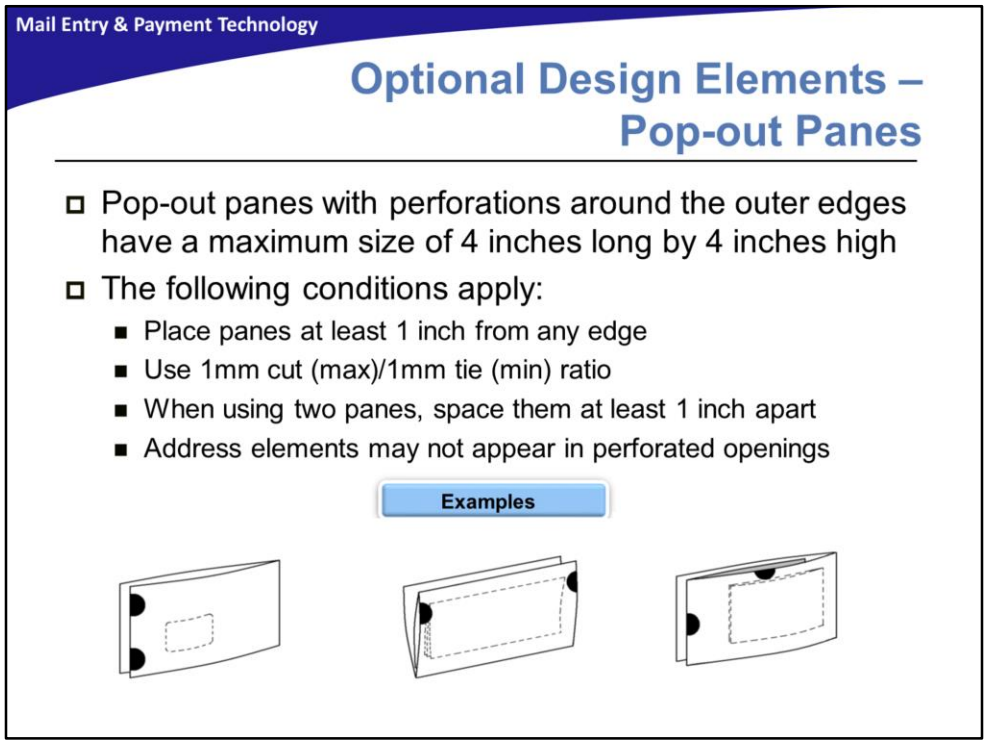
1. Limited to two on only one external panel.
2. Either circular with a 2-inch maximum diameter or rectangular with a maximum of 2 inches long by 1-1/2 inches high with slightly rounded 1/4 inch radius corners.
3. Placed at least 1-1/2 inches from all edges of the mailpiece if on the addressed side.
4. Placed at least 5 inches from the leading edge and 1-1/2 inches from all other edges if on the non-addressed side.
5. Positioned at least 1-1/2 inches apart when two or more die-cut openings are used.




Folded self-mailers may be prepared with strips called panes that are pulled open to reveal mailpiece contents. These design elements must be placed only on the unaddressed side of the mailpiece and may be rectangular, circular, or oval shaped. Perforations, a row of small holes punched in a sheet of paper so that a section can be torn easily, are used to create pull-open strips, pop-out, or pop-open panes subject to the following requirements:

- Two parallel perforated lines must be spaced at least 1/2 inch apart creating a pull open strip. Position perforated strips parallel to the height of the mailpiece at least 5 inches from the leading edge and 2 inches from the trailing edge. Position perforated strips parallel to the length of the mailpiece at least 1 inch from the top. Perforations have a 1mm cut (max)/1mm tie (min) ratio.
- Perforated panes may not be prepared on pieces with die-cuts or on any mailpiece made of newsprint.

Examples of perforations on the non-address side panel are provided on the bottom of the slide, but these do not represent the entire universe of possible designs.

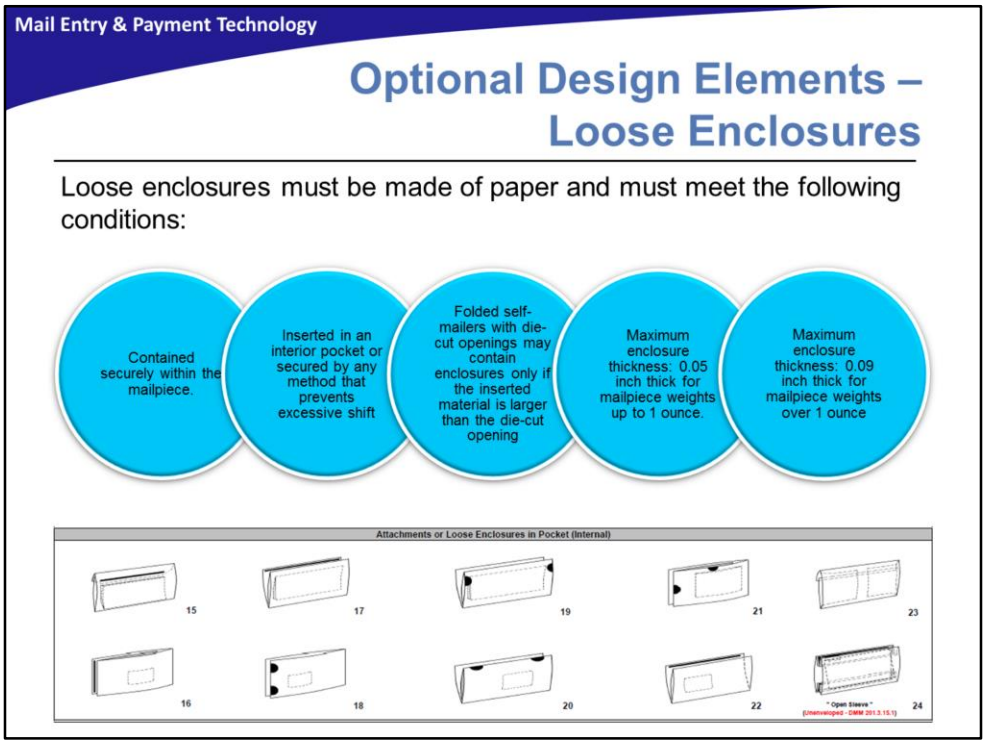



Pop-out panes with perforations around the outer edges have a maximum size of 4 inches long by 4 inches high. The following conditions apply:

- Place panes at least 1 inch from any edge.
- Use 1mm cut (max)/1mm tie (min) ratio.
- When using two panes, space them at least 1 inch apart.
- Address elements may not appear in perforated openings.

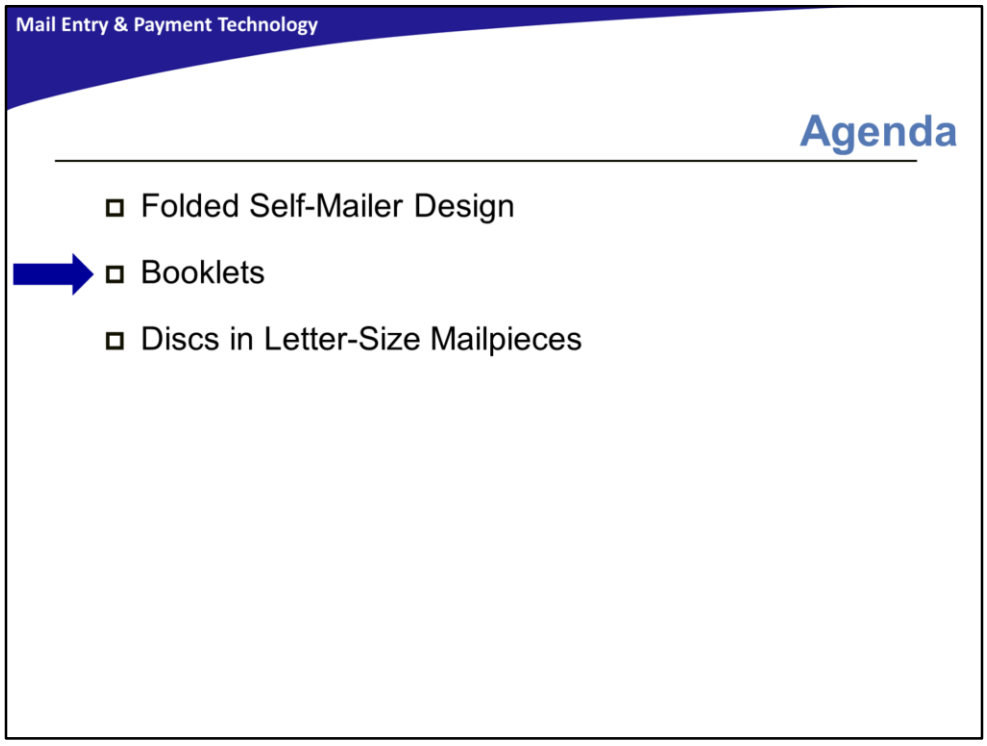
Pop-open panes with perforations on three sides must meet the following conditions:

- The outer edges of the pull-open panel are a maximum of 4 inches long by 4 inches high.
- If prepared with multiple panes, they must be spaced at least 1 inch apart.
- Panes must be placed at least 1 inch from all edges.
- Perforation patterns have 1 mm cut (max)/1 mm tie (min) ratio.




Folded self-mailers with loose enclosures must be securely sealed to ensure containment of the enclosed material and prevent excessive enclosure shift during processing. Loose enclosures must be made of paper and must meet the following conditions:

- They must be contained securely within the mailpiece.
- They must be inserted in an interior pocket or secured by any method that prevents excessive shift during normal handling. Pockets are not counted as panels.
- Folded self-mailers with die-cut openings may contain enclosures only if the inserted material is larger than the die-cut opening.
- Enclosed material does not exceed the maximum thickness of:
  - 0.05 inch thick for mailpiece weights up to 1 ounce.
  - 0.09 inch thick for mailpiece weights over 1 ounce.
- One empty reply envelope may be inserted within the first fold (manufacturing fold) of a quarter-folded self-mailer and must be secured within a fold to prevent separation during normal handing.

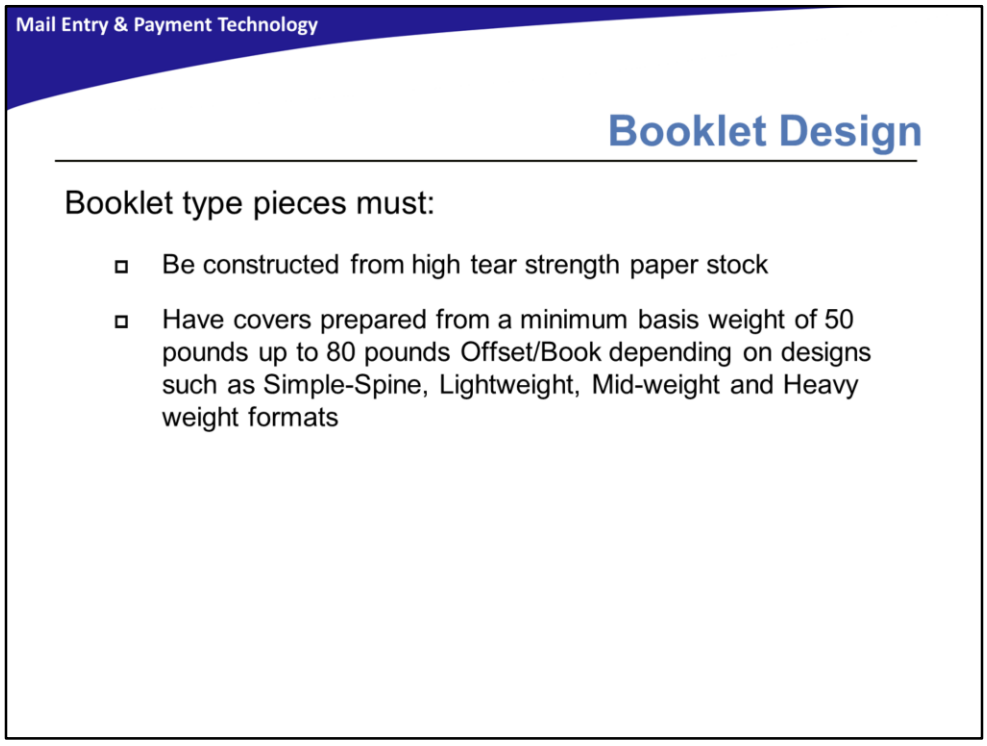



This section of the training will cover booklets and booklet design.

## Booklet

- Letter size mailpiece
- Multiple pages
- Permanently bound

Booklets must have a bound edge (spine.) Sheets that are fastened with at least two staples in the manufacturing fold (saddle stitched), perfect bound, pressed-glued, or joined together by another binding method that produces a spine where pages are attached together are considered booklets. Booklets are open on three sides before sealing, similar in design to a book. In general, booklets must be uniformly thick. Large bound booklets that are folded for mailing may qualify for automation and machinable prices if the final mailpiece remains nearly uniform in thickness and conforms to all other automation standards.



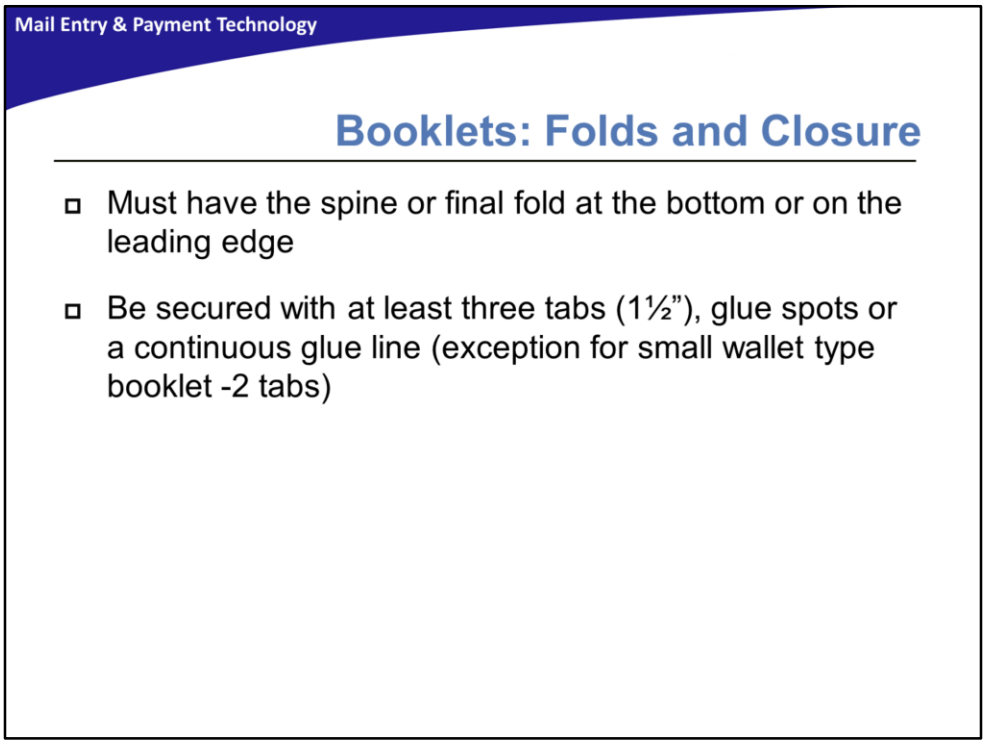

Booklet type pieces must be constructed from high tear strength paper stock and have covers prepared from a minimum basis weight of 50 pounds Offset/Book. Some designs, such as Lightweight and Heavy weight, require a higher for basis weight.

## Booklet Measurements

Must meet aspect ratio
(L÷ H = 1.3 – 2.5)

| | Min | Max |
|---|---|---|
| Height | 3.5″ | 6″ |
| Length | 5″ | 10.5″ |
| Thickness | .009″ | .25″ |
| Weight | ----- | 3 oz |

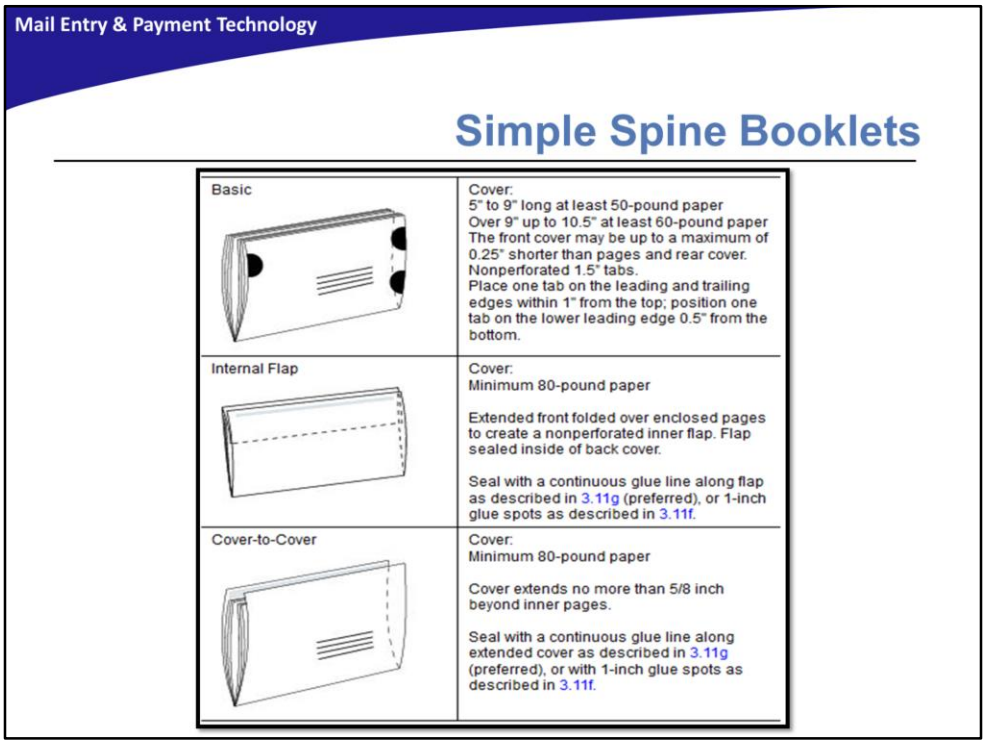
Booklets must meet the requisite aspect ratio and measure at least 3 ½ inches high, 5 inches long, and .009 inches thick. Booklets may not exceed 6 inches high, 10 ½ inches long, ¼ inch thick and 3 ounces in weight.




Booklets must have the spine or final fold at the bottom or on the leading edge and must be secured with at least three 1½ inch tabs. Glue spots or a continuous glue line may also be used. Note: the small wallet type booklet only requires 2 tabs.

In the following slides, we will provide examples of the following booklet types: simple spine booklets, oblong booklets, wallet style booklets, and folded booklets.

Tabs should be used as seals on the leading edge of small booklets less than 5 inches high, and may be placed closer to the top and bottom edges than shown




For simple spine booklets, the spine forms the bottom edge of the mailpiece. The length or method used to seal the booklet determines the weight of the paper forming the cover. Open edges can be sealed with tabs, glue lines, or glue spots dependent on the design.

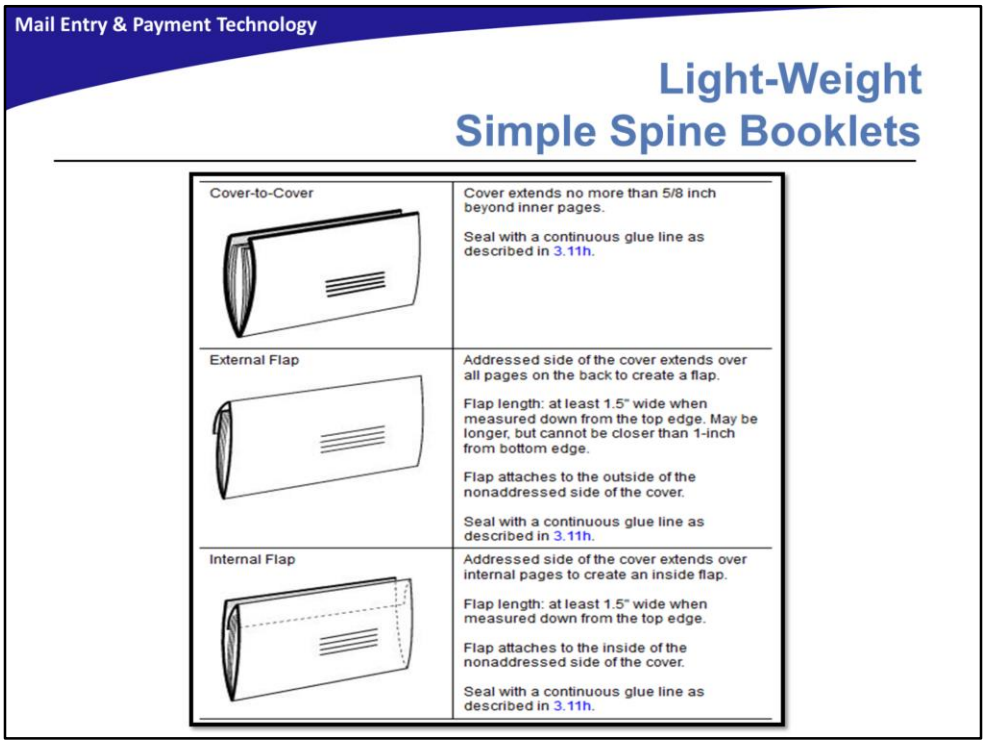
Simple Spine Booklets have a:

•Maximum weight—3 ounces

•Maximum height—6 inches

•Maximum length—9.5 inches unless noted

•Cover paper weight—80-pound paper unless noted




This slide shows examples of light-weight simple spine booklets..

Lightweight Simple Spine Booklets have a:

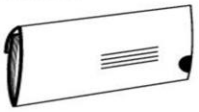
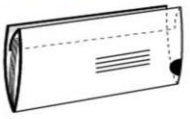
•Maximum weight—0.8 ounce

•Maximum height—6 inches

•Maximum length—10.5 inches, and

•Cover paper weight—70-pound paper, unless noted

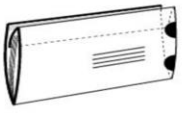
## Mid-Weight Simple Spine Booklets

| | |
|---|---|
| Cover-to-Cover  | Cover extends no more than 5/8 inch beyond inner pages.<br><br>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches. |
| External Flap  | Addressed side of the cover extends over all pages on the back to create a flap.<br><br>Flap length: at least 1.5" wide when measured down from the top edge. May be longer, but cannot be closer than 1-inch from bottom edge.<br><br>Flap attaches to the outside of the nonaddressed side of the cover.<br><br>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches. |
| Internal Flap  | Addressed side of the cover extends over internal pages to create a flap.<br><br>Flap length: at least 1.5" wide when measured down from the top edge.<br><br>Flap attaches to the inside of the non-addressed side of the cover.<br><br>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches. |

Mid-Weight Simple Spine Booklets have a:

- Weight—over 0.8 ounce up to 1.6 ounces
- Maximum height—6 inches
- Maximum length—10.5 inches
- Cover paper weight—70-pound paper unless noted

# Heavy-Weight Simple Spine Booklets

| | |
|---|---|
| Cover-to-Cover  | Cover extends no more than 5/8 inch beyond inner pages.<br><br>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge. |
| External Flap  | Addressed side of the cover extends over all pages on the back to create a flap.<br><br>Flap length: at least 1.5" wide when measured down from the top edge. May be longer, but cannot be closer than 1 inch from bottom edge.<br><br>Flap attaches to the outside of the nonaddressed side of the cover.<br><br>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge. |
| Internal Flap  | Addressed side of the cover extends over internal pages to create a flap.<br><br>Minimum flap length: at least 1.5" wide when measured down from the top edge.<br><br>Flap attaches to the inside of the non-addressed side of the cover.<br><br>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge. |

Heavy weight simple spine booklets have a:

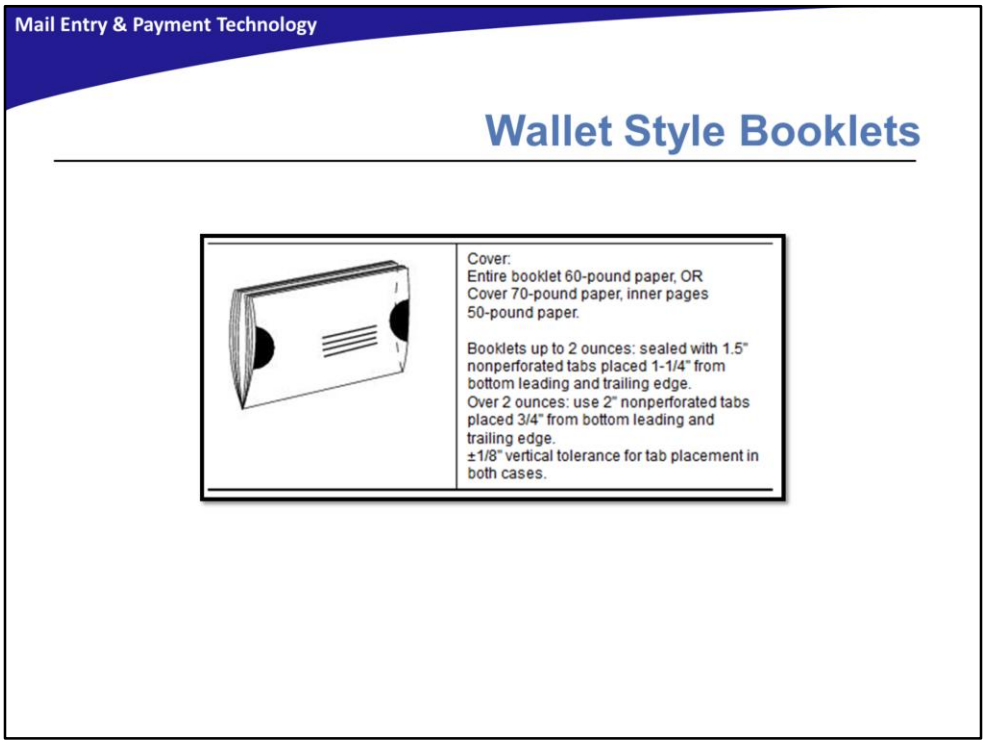
- Weight—over 1.6 ounces up to 3 ounces
- Maximum height—6 inches
- Maximum length—10.5 inches
- Cover paper weight—70-pound paper unless otherwise noted

## Oblong Booklets

- Oblong booklets with the spine on the leading edge must be sealed with:
  - Two tabs on top positioned no more than 1″ in from each side and
  - One tab along the trailing edge no lower than the middle
- Oblong booklets with the spine on the trailing edge would not be considered machinable

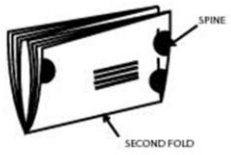
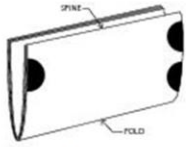
Oblong booklets with the spine on the leading edge must be sealed with two tabs on top positioned no more than 1inch in from each side and one tab along the trailing edge. The tab should be positioned no lower than the middle of the edge.

Oblong booklets with the spine on the trailing edge would not be considered machinable.

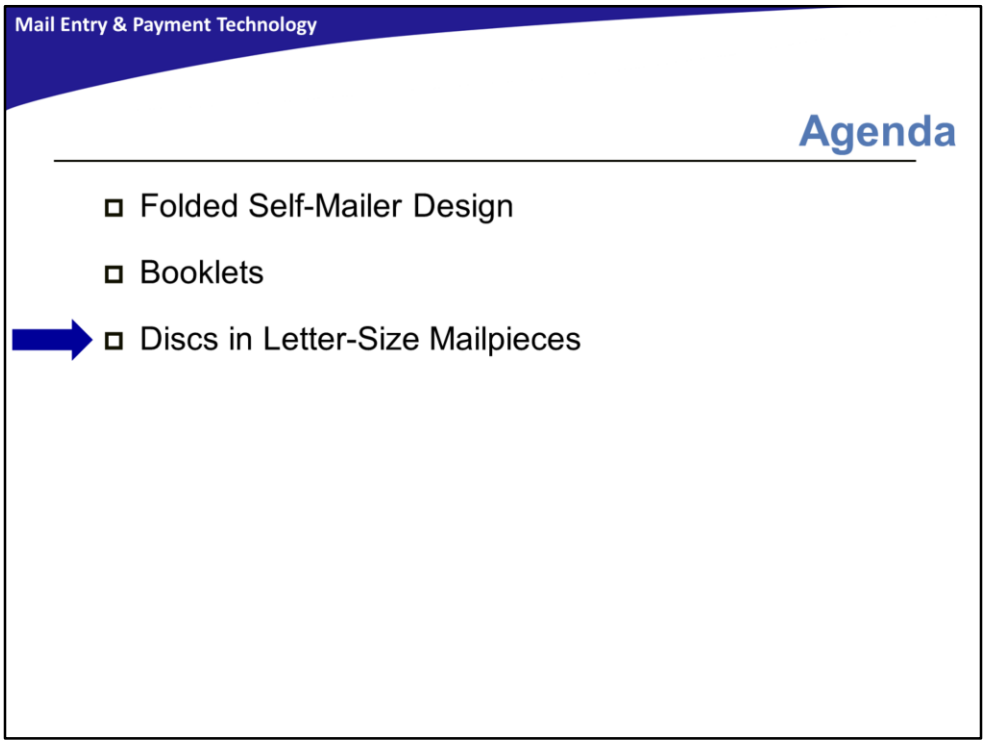



For wallet style booklets, a spine forms the bottom edge. Wallet style booklets must be from 5.2 inches to 8 inches long and 4 inches high. They can weigh up to 2.5 ounces, and they must be sealed with non-perforated tabs. Tab size and placement are dictated by the weight of the booklet.

## Folded Booklets

| | |
|---|---|
|  <br>Vertical Spine | Cover paper weight—40-pound paper<br>Two 1.5" nonperforated tabs on leading edge and one tab on trailing edge. Position upper tabs within 1-inch from the top edge. Position lower leading tab 0.5 inch from the bottom edge. |
|  <br>Horizontal Spine | Cover paper weight up to 9" L = 50lb; over 9" L up to 10.5" = 60lb<br>Tabs up to 2oz = 1.5" nonperforated tabs; over 2oz = 2" nonperforated tabs<br>Spine at top on address-side panel<br>Place one tab on the leading and trailing edge within 1" from the top; position one tab on the lower leading edge 0.5" from the bottom. |

Folded booklets are mailpieces that are bound and then folded to letter-size. The folded spine may be the leading edge or at the top of the booklet. If necessary, the booklet may be prepared with the spine as the trailing edge; however, this configuration is not recommended. The cover is at least 40-pound paper. Folded booklets must be sealed with nonperforated 1.5 inch tabs.

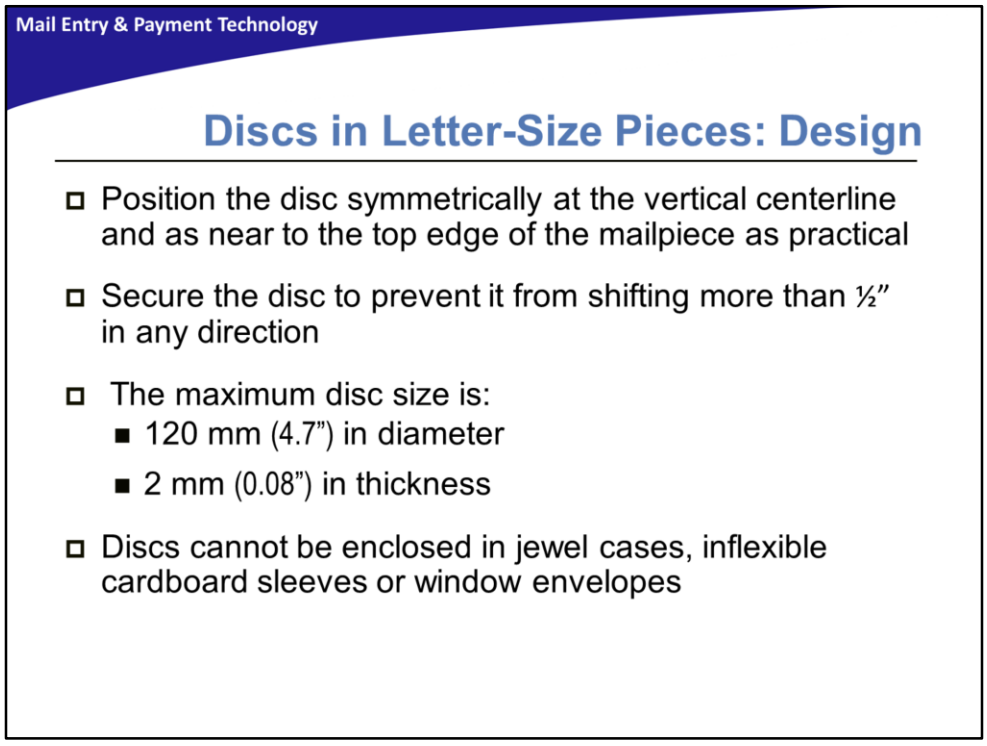



The final section of the training will cover discs in letter-size mailpieces.

## Discs in Letter-Size Pieces

- Letter-size mailpieces containing a single disc and meeting all other DMM standards for auto letters are considered automation-compatible
- Mailpieces with one enclosed disc not meeting these standards must be tested and approved for automation-compatibility

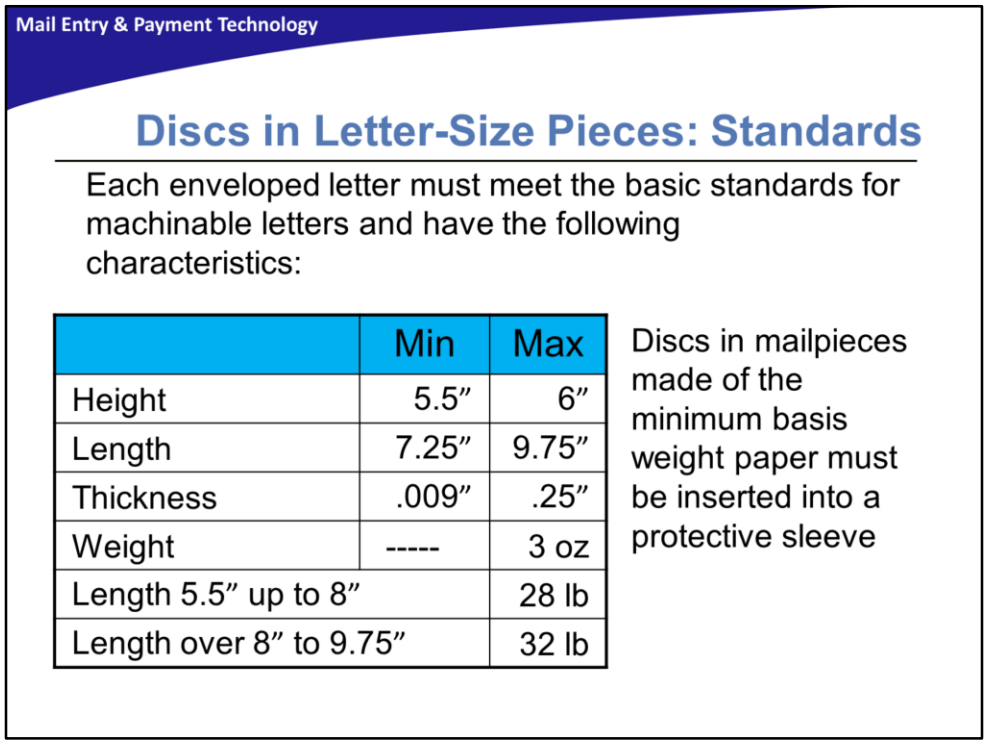

Letter-size mailpieces containing a single disc and meeting all other DMM standards for automation letters are considered automation-compatible.
Mailpieces with one enclosed disc not meeting these standards must be tested and approved for automation-compatibility.




The disc must be positioned symmetrically at the vertical centerline and as near to the top edge of the mailpiece as is practical. Secure the disc to prevent it from shifting more than 1/2 inch in any direction.

The maximum disc size is:
- 120 mm (4.7 inches) in diameter
- 2 mm (0.08 inch) in thickness

Discs cannot be enclosed in jewel cases, inflexible cardboard sleeves or window envelopes



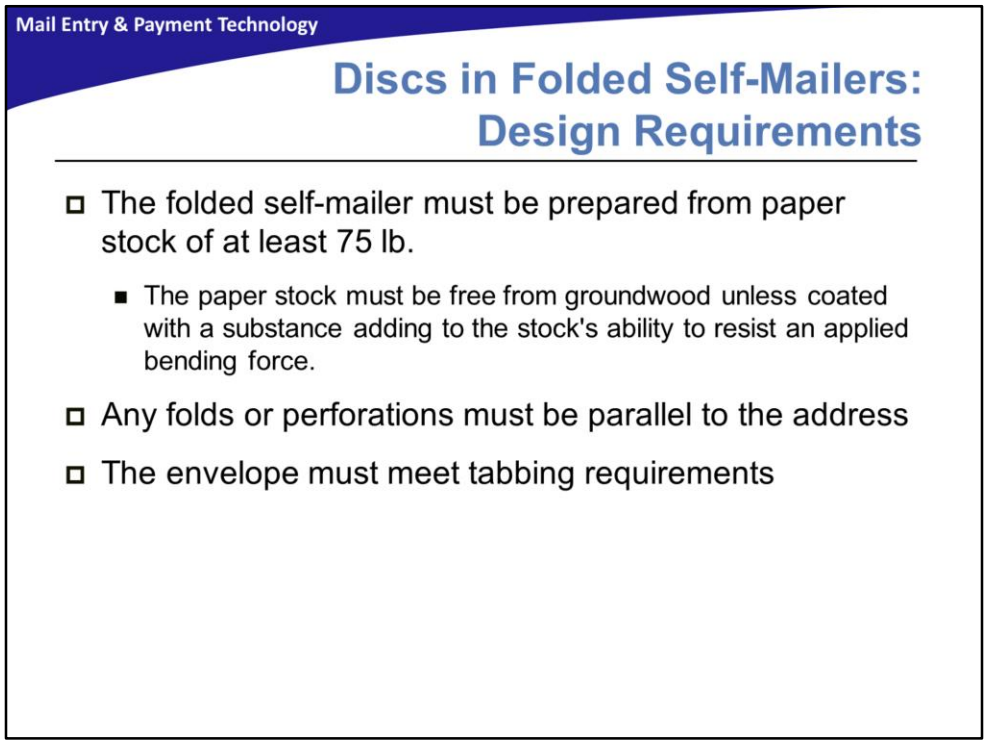

Each enveloped letter must meet the basic standards for machinable letters and have the following characteristics:

•Height of not more than 6 inches or less than 5.5 inches high,
•Length of not more than 9.75 inches or less than 7.25 inches long,
•Thickness of not more than 0.25 inch or less than 0.009 inch thick, and
•Weight of not more than 3 ounces.

A piece up to 8 inches long must be made of paper with a minimum 70-pound basis weight or equivalent.

A piece over 8 inches long (up to 9.75 inches long) must be made of paper with a minimum 80-pound basis weight or equivalent.

Discs in mailpieces made of the minimum basis weight paper must be inserted into a protective sleeve.




Folded self-mailers that contain discs must be prepared from paper stock meeting the industry standard for a basis weight of 75 pounds or greater, with none less than 75 pounds (measured weight for 500 25- by 38-inch sheets). The stock must be free from groundwood unless coated with a substance adding to the stock's ability to resist an applied bending force. Note that groundwood is a classification of paper in which more than 10% of the pulp content is derived from a mechanical process that grinds wood into pulp.

Any folds or perforations in the mailpiece must be parallel to the address, and tabbing requirements must be met.

# ADDITIONAL RESOURCES

**Visit our websites at:**

**www.usps.com**

**http://pe.usps.gov/**

**Contains the DMM, IMM and various publications.**

**https://postalpro.usps.com/**

**Contains information on Intelligent Mail, Full Service, eInduction, Seamless Acceptance etc.**

## MDA SUPPORT CENTER

Contact Information
by phone **855-593-6093**
**OR**
by email **MDA@USPS.GOV**

**MONDAY – FRIDAY, 7am – 5pm CST**