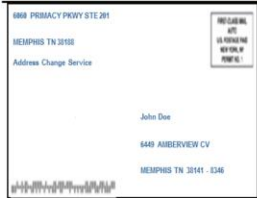
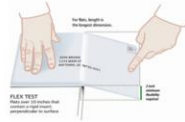


Welcome to this presentation on Basic Design Elements for Flats.

Importance of Flat Standards



Incorrect Barcode Placement



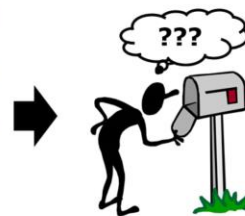
Too rigid.



Not uniformly thick.



Automated Flats Sorting Machine



It is critical to understand and meet the requirements for processing flats. Failure to do so could result in the piece not being considered a Flat and thus being subject to Parcel prices. Failure to adhere to the applicable standards can also result in the loss of automation prices.

Agenda

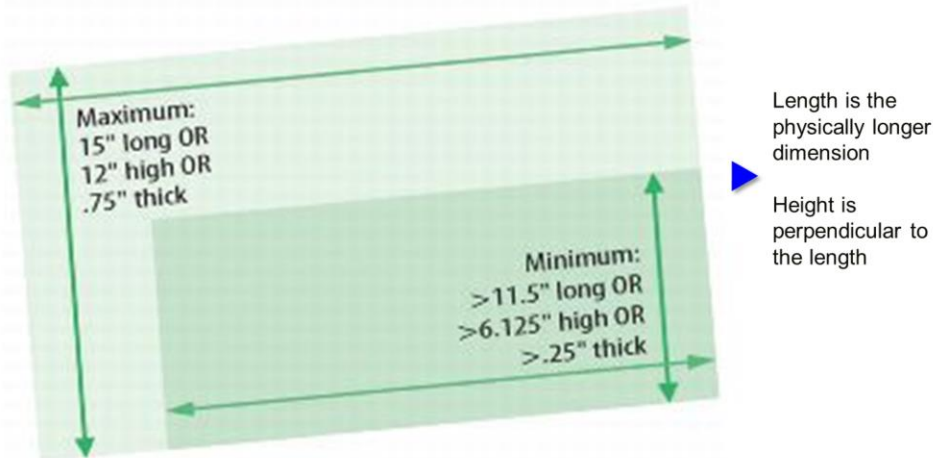
- ➡ Physical Standards of Flats
 - ▣ Addressing Standards for Flats
 - ▣ Automation Flats

Now we will cover the following:

1. Physical standards of Flats
2. Addressing Standards of Flats
3. Automation Flats.

We will begin with an overview of Physical Standards

Flats – Physical Standards



When deciding whether flats conform to mailing standards, keep in mind that the length of a flat-size mailpiece is its longest dimension and the height is the dimension perpendicular to its length. Additionally, when determining the maximum height or length of a flat, include any selvage of polywrap material that may enclose the piece. When determining the minimum height or length of a flat, do not include the selvage of any polywrap material that may enclose the piece.

For a mailpiece to be labeled as a flat, it has to be more than 11 and $\frac{1}{2}$ inches long, or more than 6 and $\frac{1}{8}$ inches high, or more than $\frac{1}{4}$ inch thick.

In general, designs that exceed any ONE of the

maximum dimensions of a letter (6 1/8" or 11 1/2" or 1/4" thick) may qualify as a flat.

Flats may not exceed a maximum of 12" inches in height, 15 inches in length, or 3/4 inch in thickness.

Flats – Physical Standards

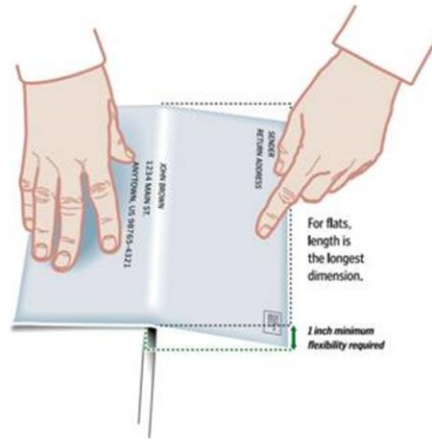
Flat-size pieces must be:

- ☐ **F**lexible
- ☐ **U**niformly thick (within ¼")
- ☐ **R**ectangular
- ☐ **D**eflection

Flats must also be flexible, uniformly thick (within ¼ of an inch), rectangular in shape and meet deflection standards. Flat-size pieces mailed at high density, high density plus, or saturation prices, and flats mailed at basic carrier route prices entered by the mailer at destination delivery units (DDUs), are not required to meet the deflection standards. Pieces that do not meet these standards are not flats and must pay parcel prices.

Flexibility Test – Part One

First test pieces with the longest side parallel to the edge of a flat surface



To measure flexibility, you must first test the piece with the longest side parallel to the edge of a flat surface and extend the piece halfway off the surface.

Press down on the piece at a point 1 inch from the outer edge, in the center of the piece's length, exerting steady pressure.

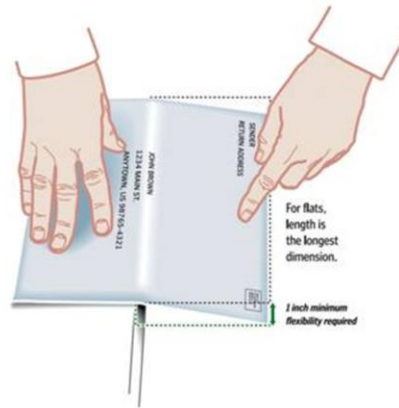
The piece is not flexible if it cannot bend at least 1 inch vertically without being damaged.

Flexibility Test – Part One

If the piece can pass this test
AND does not contain a rigid
insert, no further testing is
necessary

If the piece passes this test
but it **DOES** have rigid
contents, go to the next step,
part 2

Note: A permanent bound
edge is not considered a rigid
item.

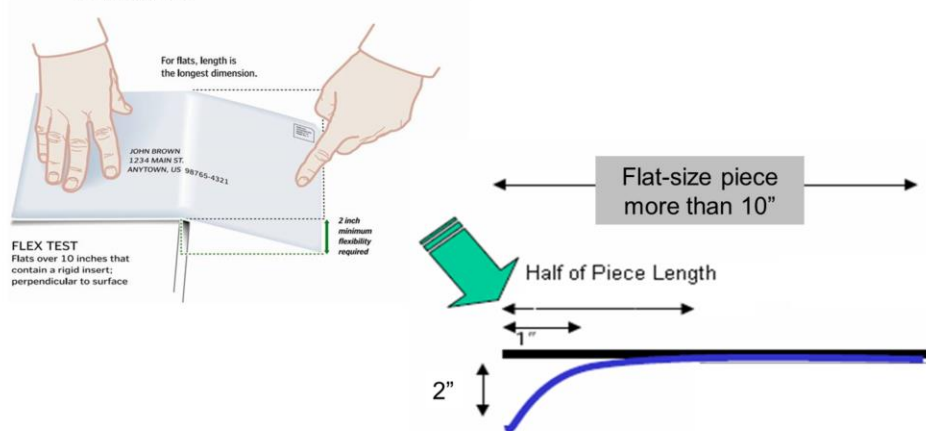


If the piece does not contain rigid contents, the test is complete.

If the piece contains rigid contents, proceed to part 2 of the flexibility test.

Flexibility Test – Part Two

Mailpieces that pass first test and contain rigid contents



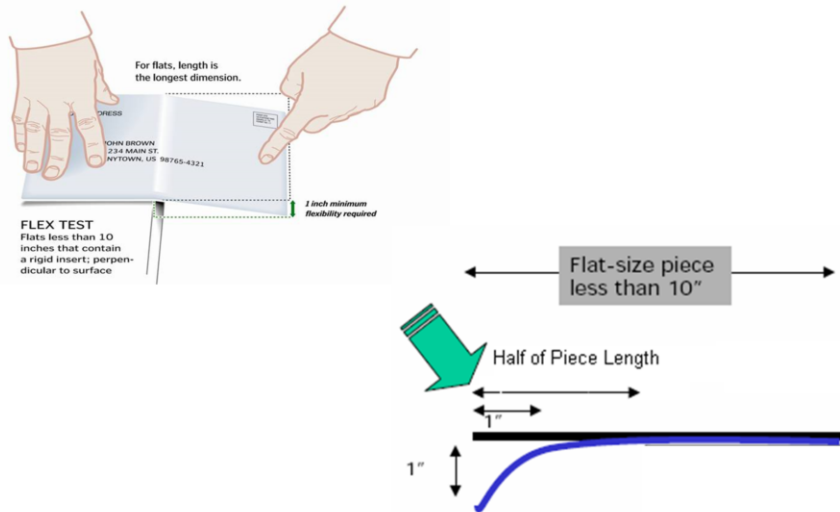
For pieces greater than 10" long, place the piece with the length perpendicular to the edge of a flat surface and extend the piece 5 inches off the surface.

Press down on the piece at a point 1 inch from the outer edge, in the center of the piece's width, exerting steady pressure.

Turn the piece around and repeat steps 1 and 2.

The piece is flexible if both ends can bend at least 2 inches vertically without being damaged.

Flexibility Test – Part Two



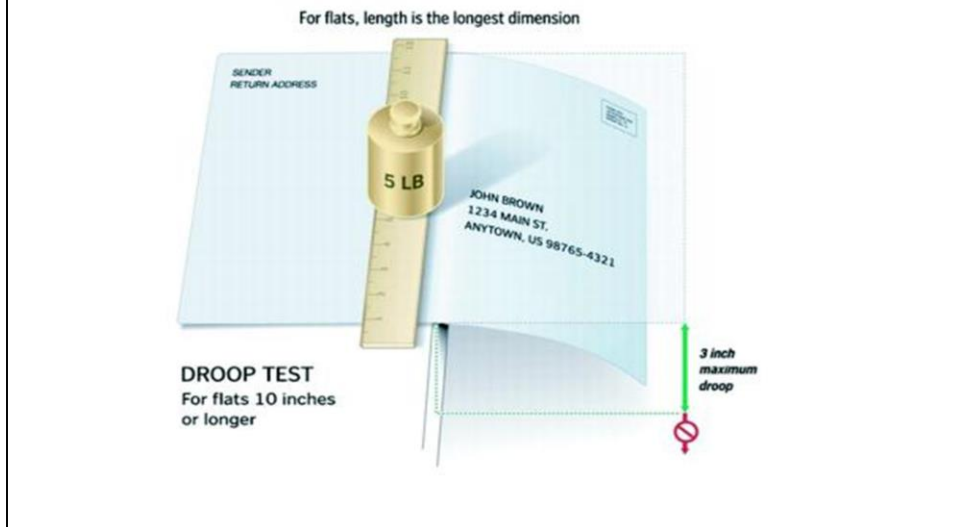
For pieces that are less than 10 inches long and contain a rigid insert, place the piece with the length perpendicular to the edge of a flat surface and extend the piece one-half of its length off the surface.

Press down on the piece at a point 1 inch from the outer edge, in the center of the piece's width, exerting steady pressure.

Turn the piece around and repeat steps 1 and 2. The piece is flexible if both ends can bend at least 1 inch vertically without being damaged.

A rigid item must be secured at one corner.

Deflection Test

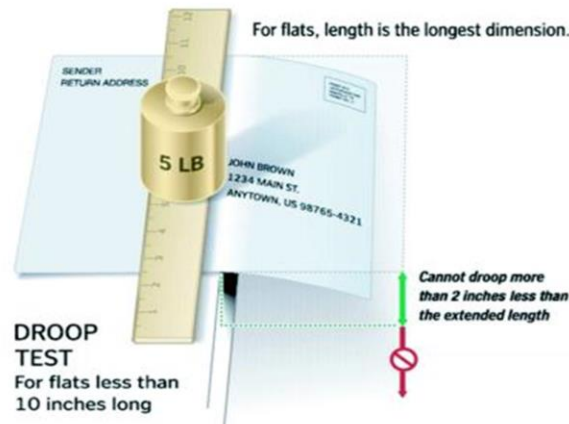


While flats must be flexible, they cannot excessively droop. As a result, flats must meet maximum deflection standards. Flat-size pieces mailed at high density, high density plus, or saturation prices, and flats mailed at basic carrier route prices entered by the mailer at destination delivery units (DDUs), are not required to meet these deflection standards. Test deflection as follows:

To test deflection for pieces 10 inches or longer, place the piece on a flat, straight-edge surface with the length perpendicular to the edge of the surface and extend the piece 5 inches off the edge of the surface. Test square-shaped bound flats by placing the bound edge parallel to the edge.

Place a flat 12-inch ruler (or other similar flat object 12 inches or longer) on top of the mailpiece with the length of the ruler parallel to the edge of the surface and as close to the edge as possible so that the 5-pound weight does not extend past the edge. Place a certified 5-pound weight on the center of the ruler to hold the piece in place. Determine the vertical deflection in inches. Turn the piece around 180 degrees and repeat the process. The piece is mailable as a flat if it does not droop more than 3 inches vertically at either end.

Deflection Test



For pieces less than 10 inches long, place the piece on a flat, straight-edge surface with the length perpendicular to the edge of the surface and extend the piece one-half of its length off the edge of the surface. Test square-shaped bound flats by placing the bound edge parallel to the edge.

Place a flat 12-inch ruler (or other similar flat object 12 inches or longer) on top of the mailpiece with the length of the ruler parallel to the edge of the surface and as close to the edge as possible so that the 5-pound weight (see 1.6b..3.) does not extend past the edge.

Place a certified 5-pound weight on the center of the ruler to hold the piece in place. Determine the vertical deflection in inches. Turn the piece around 180 degrees and repeat the process.

The piece is mailable as a flat if it does not droop more than 2 inches less than the extended length at either end. For example, a piece 8 inches long would be extended 4 inches horizontally off a flat surface. It must not droop more than 2 inches vertically at either end.

Flats – Physical Standards

Uniform Thickness

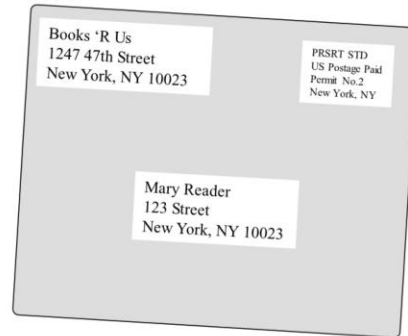
- ☐ Flat-size mailpieces must be uniformly thick so that any bumps, protrusions, or other irregularities do not cause more than 1/4-inch variance in thickness.
- ☐ Mailers must secure nonpaper contents to prevent shifting of more than 2 inches within the mailpiece if shifting would cause the piece to be nonuniformly thick or result in the contents bursting out of the mailpiece

Flat-size mailpieces must be uniformly thick so that any bumps, protrusions, or other irregularities do not cause more than 1/4-inch variance in thickness. When determining thickness, exclude the outside edges (1 inch from each edge) when the contents do not extend into those edges. Also, exclude the selvage of any polywrap covering from this determination. Additionally, mailers must secure nonpaper contents to prevent shifting of more than 2 inches within the mailpiece if shifting would cause the piece to be nonuniformly thick or result in the contents bursting out of the mailpiece

Flats – Physical Standards

Rectangular

- ❑ May be prepared with finished corners not exceeding a radius of .125" inch ($\frac{1}{8}$ inch)



Each flat-size piece must be rectangular, except that card type flat-size mailpieces may have finished corners that do not exceed a radius of 0.125 inch ($\frac{1}{8}$ inch).

Flats – Physical Standards

Polywrap Film or Similar Material:

- ❑ Only products listed as approved on the USPS RIBBS Web site may be used

Physical Requirements:

- ❑ Outlined in DMM section 201.4.5



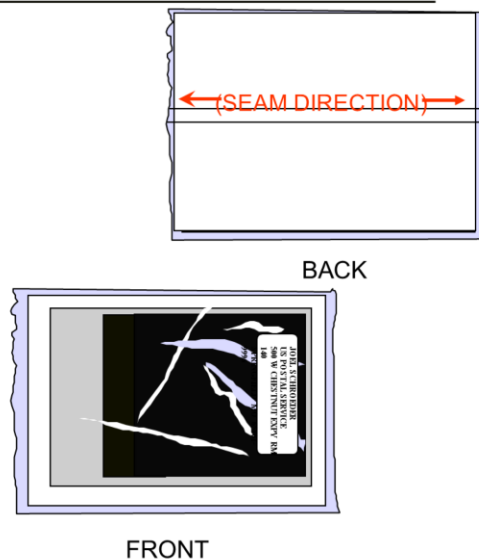
Mailers using polywrap film or similar material on flat-size mailpieces (except pieces mailed at high density, high density plus, or saturation prices) must use a product listed as approved on the USPS RIBBS Web site (<http://ribbs.usps.gov>) may be used on flat-size mailpieces.

The specific physical requirements for polywrap film or similar material on flat-size mailpieces can be viewed in DMM section 201.4.5.

Flats – Physical Standards

Polywrap Film or Similar Material:

- ❑ Wrap direction must be around the longer axis
- ❑ Seam:
 - Parallel to longer dimension
 - Front or back
 - Not over address or barcode

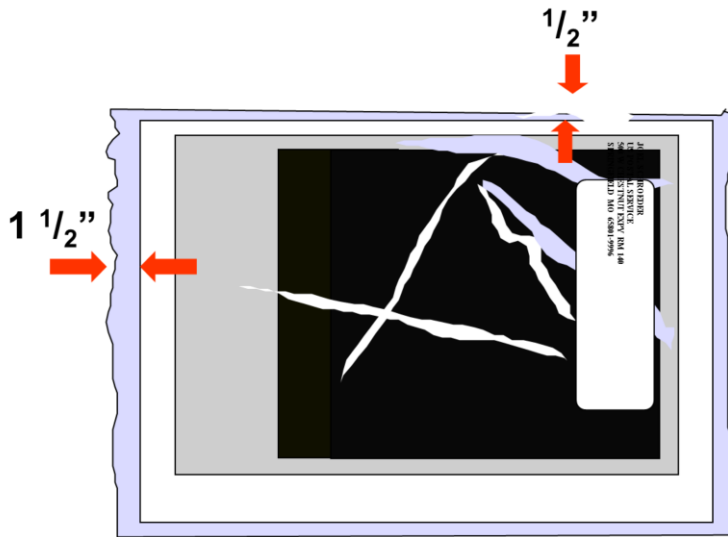


When using polywrap film or similar material on a flat, the material must completely cover the flat.

The wrap direction must be around the longer axis (parallel to the length) of the mailpiece, with the seam parallel to that axis.

The polywrap over the address area must be a smooth surface to avoid interference with address and barcode readability. The preferred seam placement is on the nonaddressed side of the mailpiece. If the seam is placed on the addressed side, the seam must not cover any part of the address and barcode, postage area, or any required markings or endorsements.

Flats – Physical Standards



For purposes only of the polywrap standards for overhang (selvage) the edge of the mailpiece designated as top must be one of the two physically longer edges of the piece, regardless of address orientation and whether bound or unbound. Any polywrap overhang (selvage) around the four edges of the mailpiece (top, bottom, and left and right sides) must meet these standards:

- When the mailpiece contents are totally positioned at the bottom of the polywrap, the overhang must not be more than 0.5 inch at the top of the mailpiece.
- When the mailpiece contents are totally positioned to the left or to the

right side of the polywrap, the overhang must not be more than 1.5 inches on the opposite side.

- The polywrap covering must not be so tight that it bends the mailpiece.

Flats – Physical Standards

Labels, Stickers, and Release Cards

- ☐ 201.4.8.1 – Use
- ☐ 201.4.8.2 – Pressure-Sensitive Label
- ☐ 201.4.8.3 – “Sandwich” Label
- ☐ 201.4.8.4 – Flats with Attached Release Cards
- ☐ 201.4.8.5 – Standards for Release Cards

Mailers can use labels, stickers, and release cards but must adhere to the standards in the DMM sections listed here.

Flats – Physical Standards


Catalogs

- A bound flat-sized mailpiece with at least 16 pages meeting flat physical criteria.
- Provide a listing of products offered for sale arranged systematically and include images, photographs or illustrations of the products, descriptive details, and prices.
- Must contain an order form, a phone number, or a web address to place orders and provides shipping options for the products offered for sale.



A catalog is a bound flat-sized mailpiece with at least 16 pages, meeting flat physical criteria. Catalogs provide a listing of products offered for sale arranged systematically and include images, photographs or illustrations of the products, descriptive details, and prices. Catalogs must contain an order form, a phone number, or a web address to place orders and provides shipping options for the products offered for sale.

Agenda

- Physical Standards of Flats
-  □ Addressing Standards for Flats
- Automation Flats

Now that we have provided an overview of the physical standards for flats, we will discuss the addressing standards for flats.

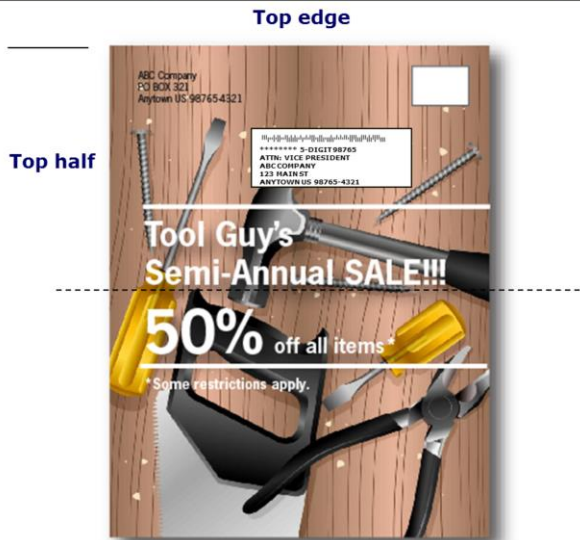
Flats – Addressing

- ❑ Minimum 8-point type (6-point for automation flats)
- ❑ 6-point if all capital letters with DPBC
- ❑ Characters in address can not overlap
- ❑ Address lines can not touch or overlap
- ❑ Address elements separated by no more than five blank character spaces

The Postal Service has address placement and formatting requirements for Periodicals, Standard Mail, Bound Printed Matter, Media Mail, and Library Mail flat-sized mailpieces sent at automation, presorted, or carrier route prices. Automation flats must be addressed in a minimum of 6-point type in all capital letters. All other commercial price flat-sized mailpieces must use a minimum of 8-point type.

For all automation price pieces, the characters must not overlap, and each address element may be separated by no more than five blank character spaces.

Address Placement Enveloped, Polywrapped, or Card-style Flats



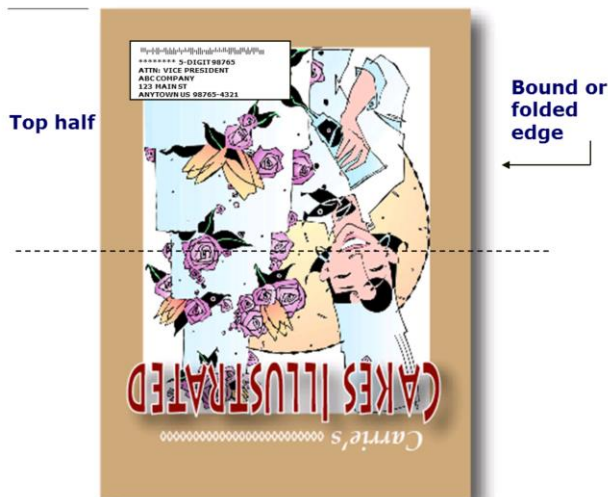
The following standards apply to enveloped, polywrapped, or card-style Periodicals (including shrinkwrapped Firm bundles), Standard Mail, Bound Printed Matter, Media Mail, and Library Mail flats mailed at presorted, automation, or carrier route prices:

The “top” of the mailpiece is either of the shorter edges. The entire delivery address must be within the top half of the mailpiece. Optimal placement is at the top edge (while maintaining the 1/8-inch clearance requirement).

If a vertical address will not fit entirely within the top half, the address may cross the midpoint if it is placed within 1 inch of the top edge. If the delivery address is placed on an insert polywrapped with the host piece, the address must not appear on a component that rotates within the bag and must remain visible

throughout the addressed component's range of motion. The insert must be affixed to maintain the address entirely in the top half throughout processing and delivery or, if not affixed, the insert must maintain at least the beginning 0.5 inch of the address in the top half.

Address Placement - Bound or Folded Flats



For bound or folded Periodicals, Standard Mail, Bound Printed Matter, Media Mail, and Library Mail flats mailed at presorted, automation, or carrier route prices not in envelopes or polywrap, the “top” is the upper edge of the mailpiece when the bound or final folded edge is vertical and on the right side of the piece. Exception: For Carrier Route (or Enhanced Carrier Route) saturation pieces, the “top” of the mailpiece is either of the shorter edges.

The entire delivery address must be within the top half of the mailpiece (see Exhibit 2.3), except under 2.3c.. Optimal placement is at the top edge (while maintaining the 1/8-inch clearance requirement). If a vertical address will not fit entirely within the top half, the address may cross the midpoint if it is placed within 1 inch of the top edge.

Nonautomation Flats


Additional Physical Standards by Mail Class:

- ☐ 201.5.1 – First-Class Mail
- ☐ 201.5.2 – Standard Mail
- ☐ 201.5.3 – Bound Printed Matter
- ☐ 201.5.4 – Media Mail and Library Mail
- ☐ 201.5.5 – Priority Mail Express, Priority Mail and Critical Mail Flats

In addition to the previously discussed physical standards and addressing requirements for flats in general, please be advised that additional physical standards apply to Nonautomation Flats by mail class which can be referenced in the Domestic Mail Manual as follows:

- 201.5.1 – First-Class Mail
- 201.5.2 – Standard Mail (Marketing Mail as of 1/2018)
- 201.5.3 – Bound Printed Matter
- 201.5.4 – Media Mail and Library Mail
- 201.5.5 – Priority Mail Express, Priority Mail Flats

Agenda

- Physical Standards of Flats
- Addressing Standards for Flats
-  Automation Flats

The final section of this training will briefly discuss automation flats.

After reviewing the necessary physical standards and addressing requirements for flats in general, lets discuss the additional criteria related to automation flats.

Automation Flats – Physical Standards

Dimensions	Minimum	Maximum
Height	5"	12"
Length	6"	15"
Thickness	.009"	0.75"

The physical standards for automation flats are slightly different from flats in general in that the minimum dimensions are actually 5 inches in height, 6 inches in length and .009 inches thick. The maximum dimensions for automation flats are same as other flats not to exceed 12 inches high, 15 inches long and $\frac{3}{4}$ inch thick.

Automation Flats

Weight Maximums

- ☐ First-Class Mail: 13 ounces
- ☐ Periodicals: 20 ounces
- ☐ Standard Mail: < 16 ounces
- ☐ Bound Printed Matter: 20 ounces

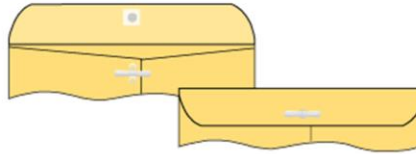
The maximum weight for an automation-compatible flat-size mailpiece is, by class:

- First-Class Mail 13 ounces
- Periodicals 20 ounces
- Standard Mail less than 16 ounces
- Bound Printed Matter 20 ounces

Automation Flats

Prohibitions

- ☐ Protrusions
- ☐ Staples



Tabs, Wafer Seals, Tape, and Glue



Booklet-Type Piece or Magazine

Clasps, strings, buttons, or like materials, or other protrusions that impede or damage mail processing equipment are prohibited on flats. Staples must not be substituted for tabs or wafer seals on pieces in automation price mailings. As a binding method, staples may be placed in the fold or spine of a magazine or booklet-type or similar mailpiece if parallel with the bound edge, tightly and securely inserted, and not protruding to damage or interfere with mail processing equipment.

Although not required, mailpieces may be prepared with tabs, wafer seals, cellophane tape, or permanent glue (continuous or spot) if these sealing devices do not interfere with the recognition of the barcode, price marking, postage information, and delivery and return addresses. Cellophane tape may not be placed over the barcode or where any part of the barcode will be printed. Tabs or seals placed in the area on which any part of the barcode is printed must contain a paper face meeting the standards for background reflectance. Tabs, wafer seals, and tape must have a peel adhesion (shear strength) value of at least 15 ounces/inch at a speed of 12 inches/minute after application to a stainless steel plate; the test is to be conducted 10 minutes after the material is applied to the plate.

The contents of flat-size mailpieces prepared in sleeves or other wrappers must be sufficiently secure in the sleeve or wrapper to stay in place during processing. 27

If material bearing the delivery address or barcode for the mailpiece is enclosed in a partial wrapper, that wrapper must be sufficiently secure to prevent the contents from shifting and obscuring the delivery address or barcode.

Flats – Physical Standards

Short Covers

- More than $\frac{3}{4}$ " from each edge
- Secured with at least two tabs etc. at least 1" from top and bottom edges of the cover



Outside Stickers

- Affixed with permanent adhesives



Automation flats may be prepared with a cover page or protective cover that is more than 3/4 inch from each edge if the cover page is secured with at least two tabs, wafer seals, or glue spots placed 1 inch from of the top and bottom edges of the cover page or protective cover.

Automation Flats - Barcoding

Barcode:

- ☐ Intelligent Mail barcode (IMb)



Placement:

- ☐ On address side at least 1/8 inch from any edge of the piece

Clearances:

- ☐ 1/8 inch between the leftmost and rightmost bars to any printing, label edge or window edge
- ☐ .028" inch above and below barcode to any printing, label edge or window edge



In addition to meeting the applicable physical standards, flat-size pieces claiming some form of commercial automation pricing must contain a properly formatted and readable Intelligent Mail barcode (IMb) that contains the applicable delivery point routing code for the intended delivery address.

The IMb can appear anywhere on the address side so long as it remains more than 1/8" inch from any edge of the mailpiece. When printing the IMb, customers must ensure that a minimum clearance of at least 1/8 inch is maintained between the leftmost and rightmost bars to any printing, label edge or window edge. A minimum clearance of .028" inch must be maintained above and below barcode to any printing, label edge or window edge.

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**