MAILPIECE DESIGN FOR AUTOMATION

November 9, 2022

Agenda

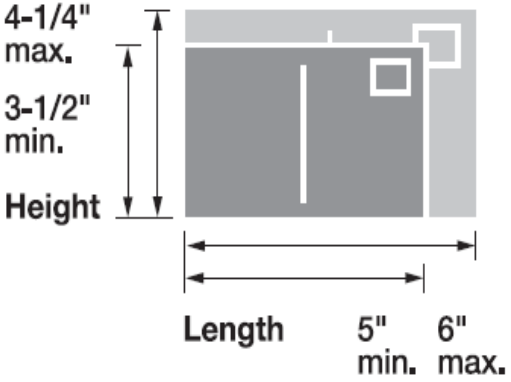
1. Mail Classification
2. Non-machinable Characteristics
3. Address Placement
4. Fonts
5. Barcode Placement & Clearances
6. Address Component Spacing
7. Flat Size Mail Address Standards
8. IMB and its Components
9. Move Update Requirements

The Postal Service separates all mail into four size categories:

- Cards
- Letters
- Large envelopes (flats)
- Parcels (package services)

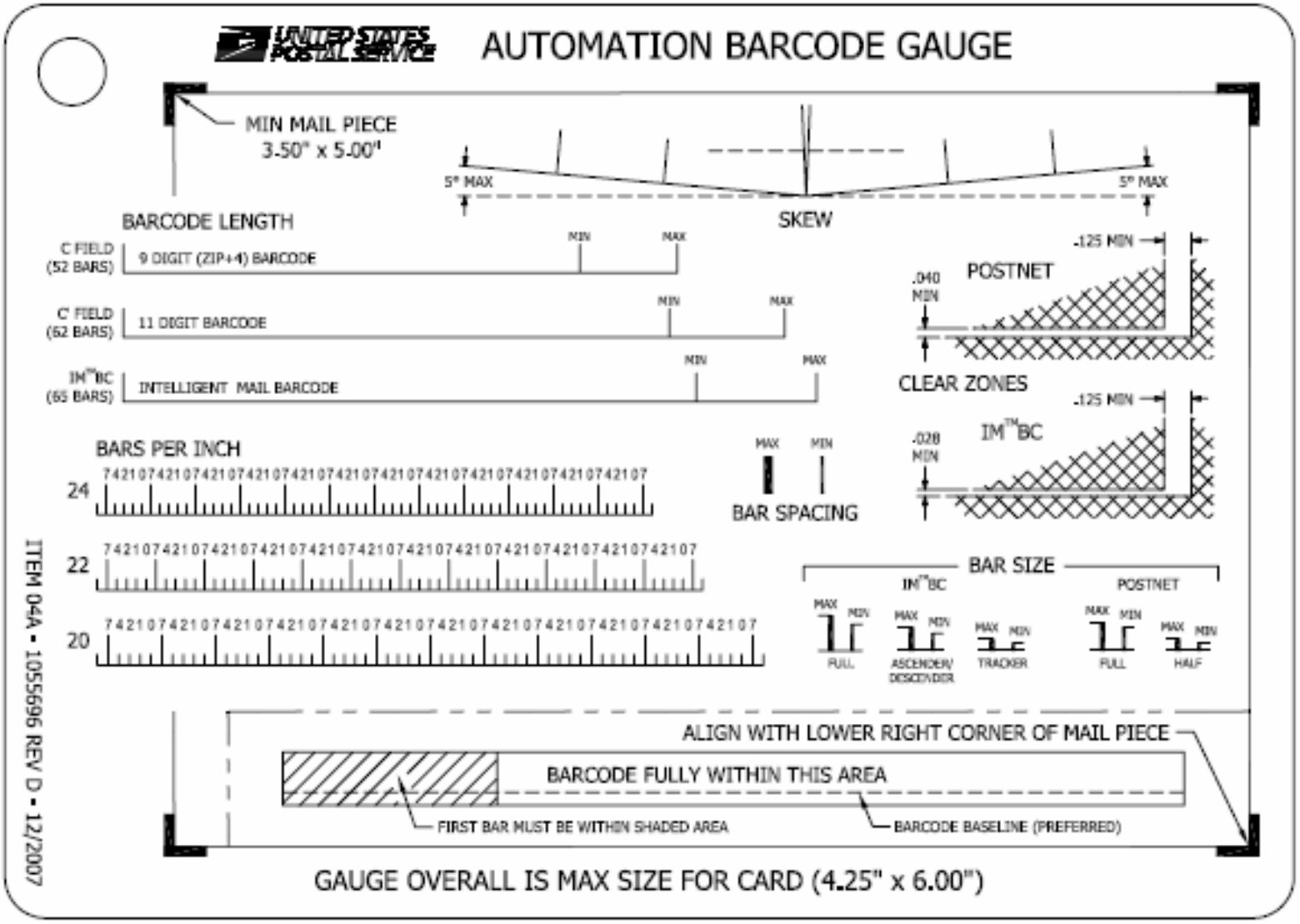
Physical Standards for Cards

Card Dimensions



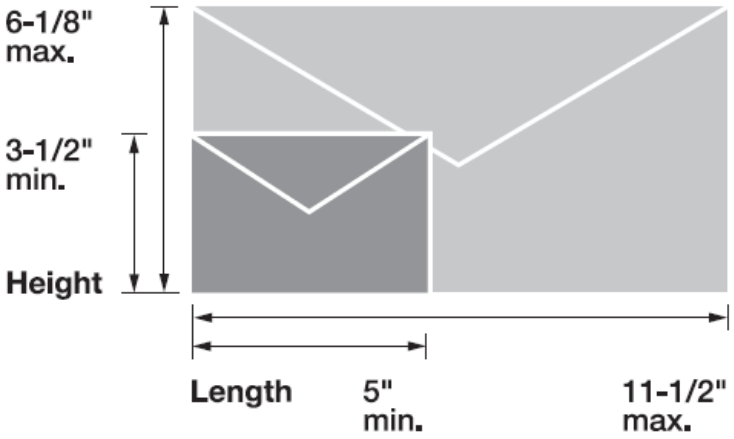
	Minimum	Maximum
Length	5 inches	6 inches
Height	3-1/2 inches	4-1/4 inches
Thickness	0.007 inch	0.016 inch

ITEM O4A BARCODE GAUGE



Physical Standards for Letters

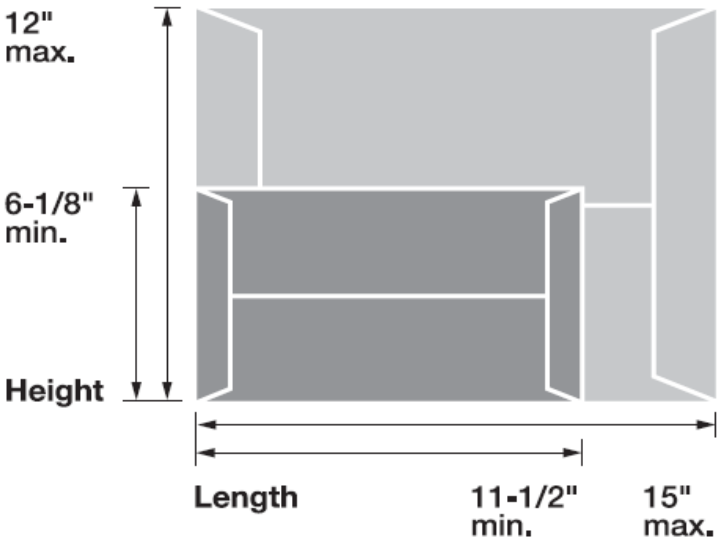
Letter Dimensions



	Minimum	Maximum
Length	5 inches	11-1/2 inches
Height	3-1/2 inches	6-1/8 inches
Thickness	0.007 inch	1/4 inch

Physical Standards For Flats

Flat Dimensions



	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

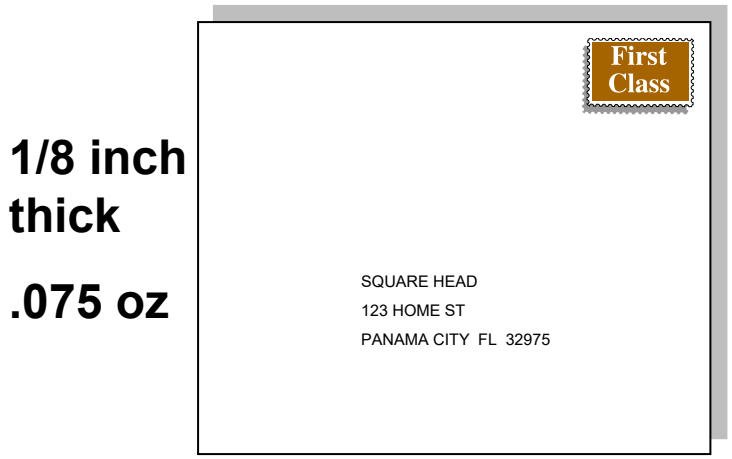
- All flats must be flexible, uniformly thick, and rectangular in shape

Categories of Mail

- Machinable
- Nonmachinable
- Automation

ASPECT RATIO

Letters & cards claimed at automation rates must meet the aspect ratio requirement.



1/8 inch thick

.075 oz

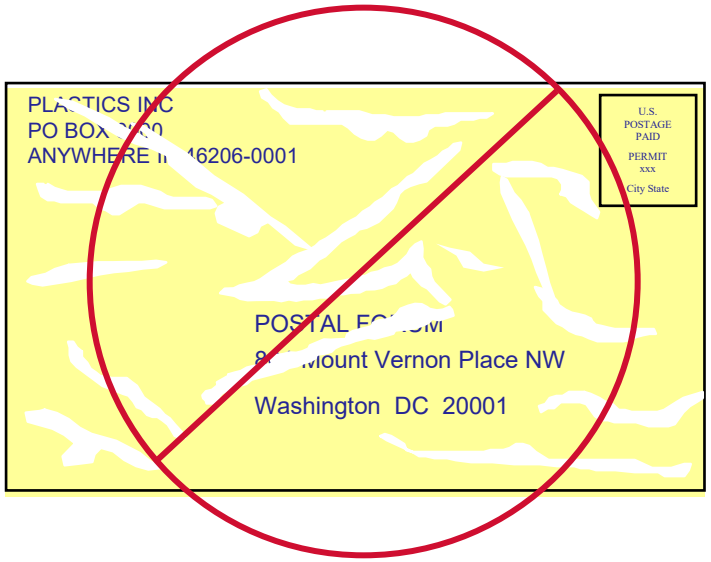
Length 6 inches

Height 6 inches

6 ÷ 6 = 1

The length divided by the height must fall between 1.3 to 2.5.

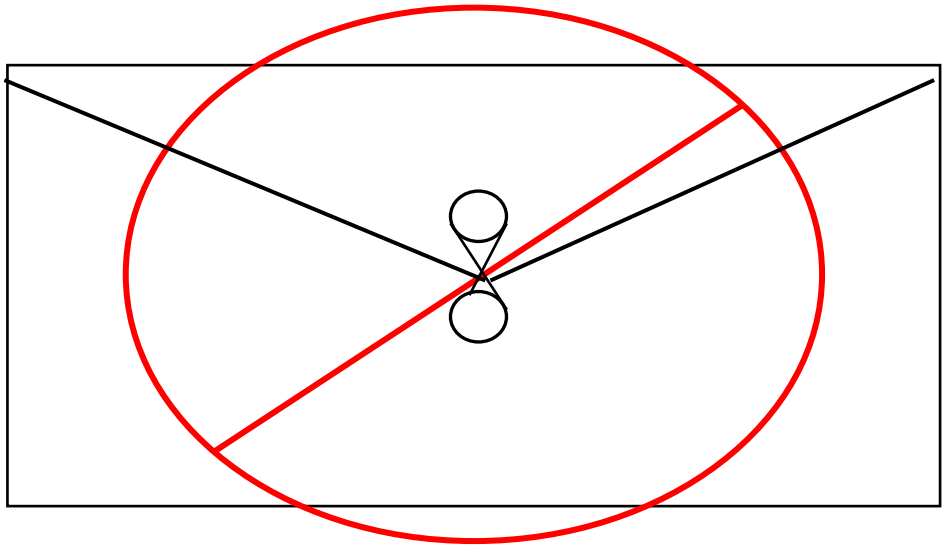
Is polybagged, polywrapped, or enclosed in any plastic material.



Don’t even think about it!!

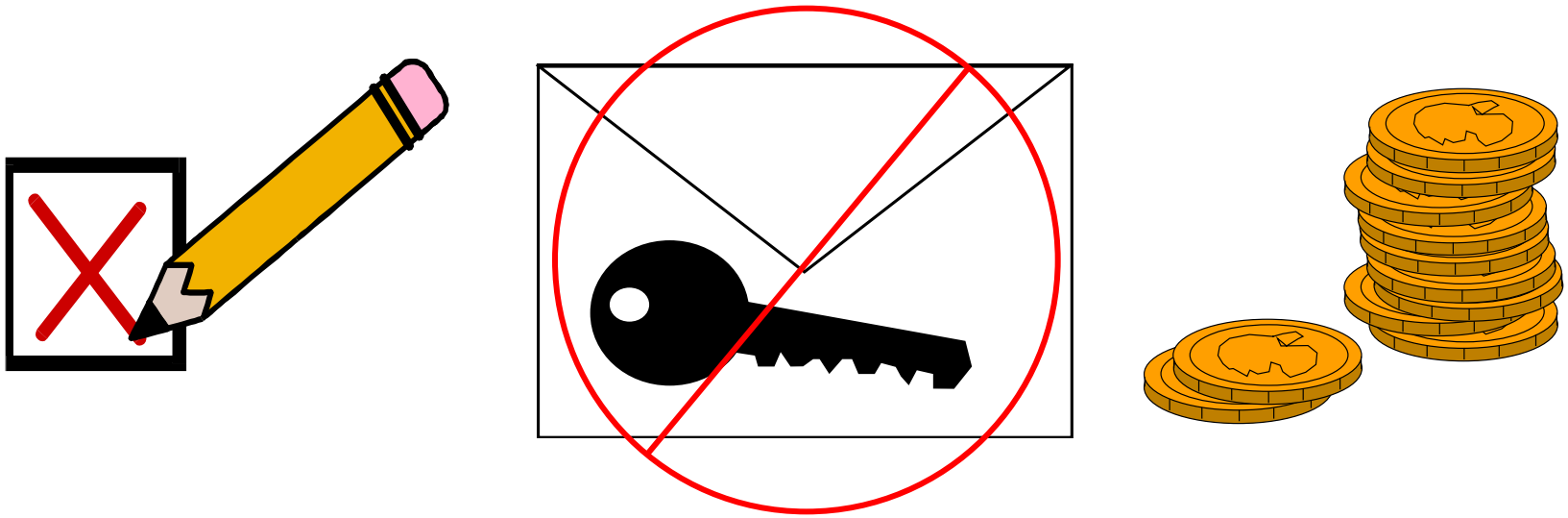
Also not permitted on automation-rate letter-size mail.

Has clasps, strings, buttons, or similar closure devices.



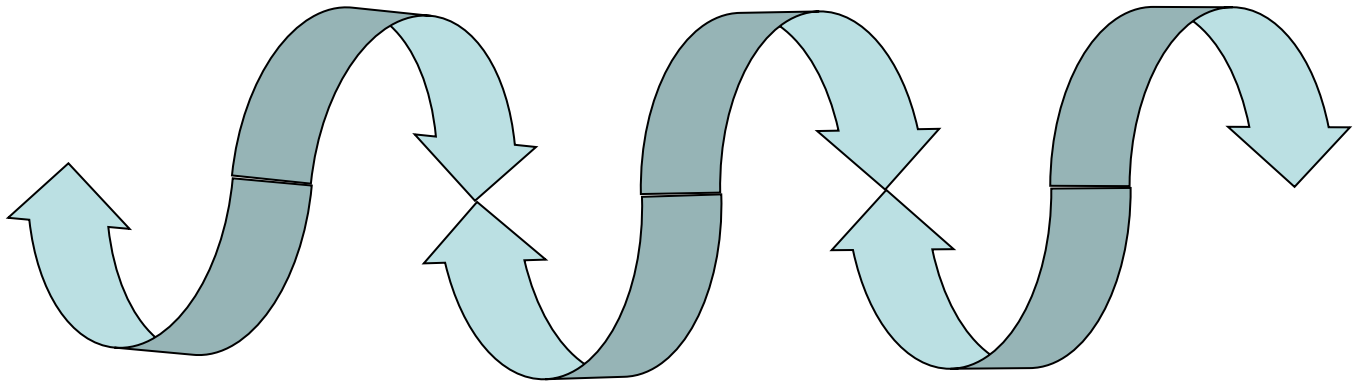
Also not permitted on automation-rate letter-size mail.

Contains items such as pens, pencils, or loose keys or coins that cause the thickness of the mailpiece to be uneven. (Also DMM 601.2.3)



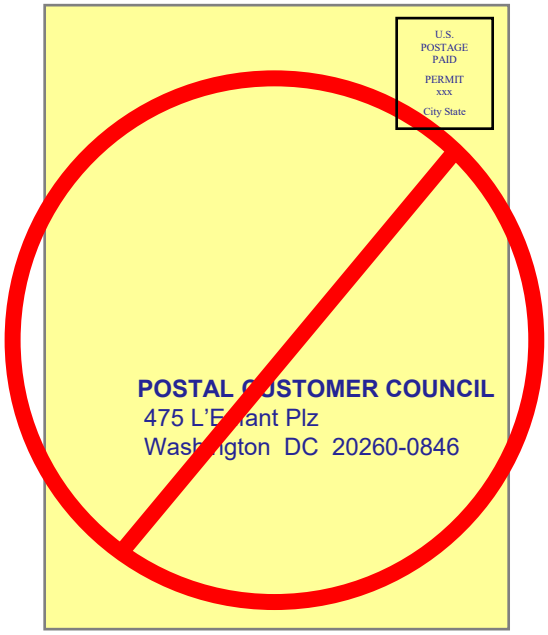
Also not permitted on automation-rate letter-size mail.

Is too rigid (does not bend easily when subjected to a transport belt tension of 40 pounds around an 11-inch diameter turn).



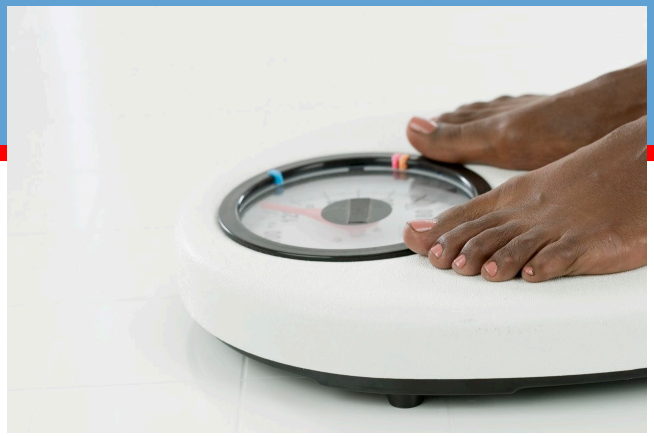
Automation-rate letter-size mail must be flexible.

Has a delivery address parallel to the shorter dimension of the mailpiece.



Automation rates require that the delivery address be parallel to the longest dimension.

Let's not forget weight

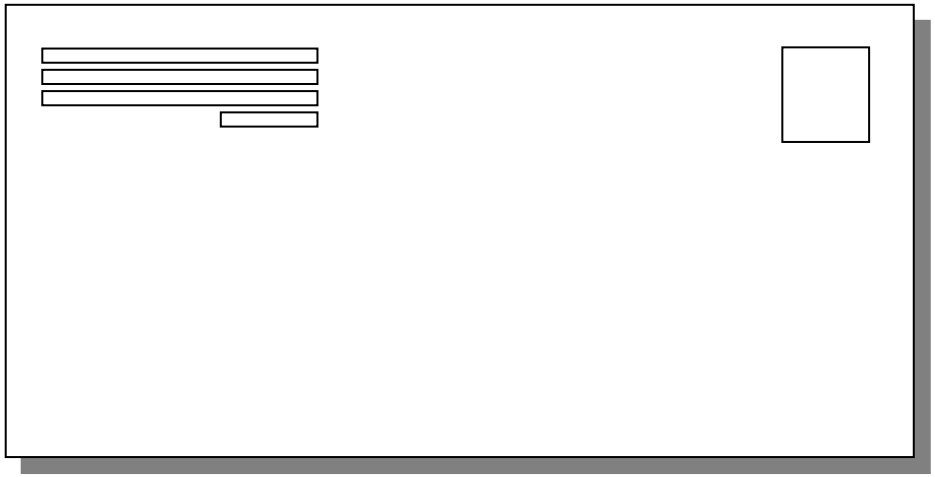


- Maximum weight for First Class and Standard machinable letters is 3.3 ounces

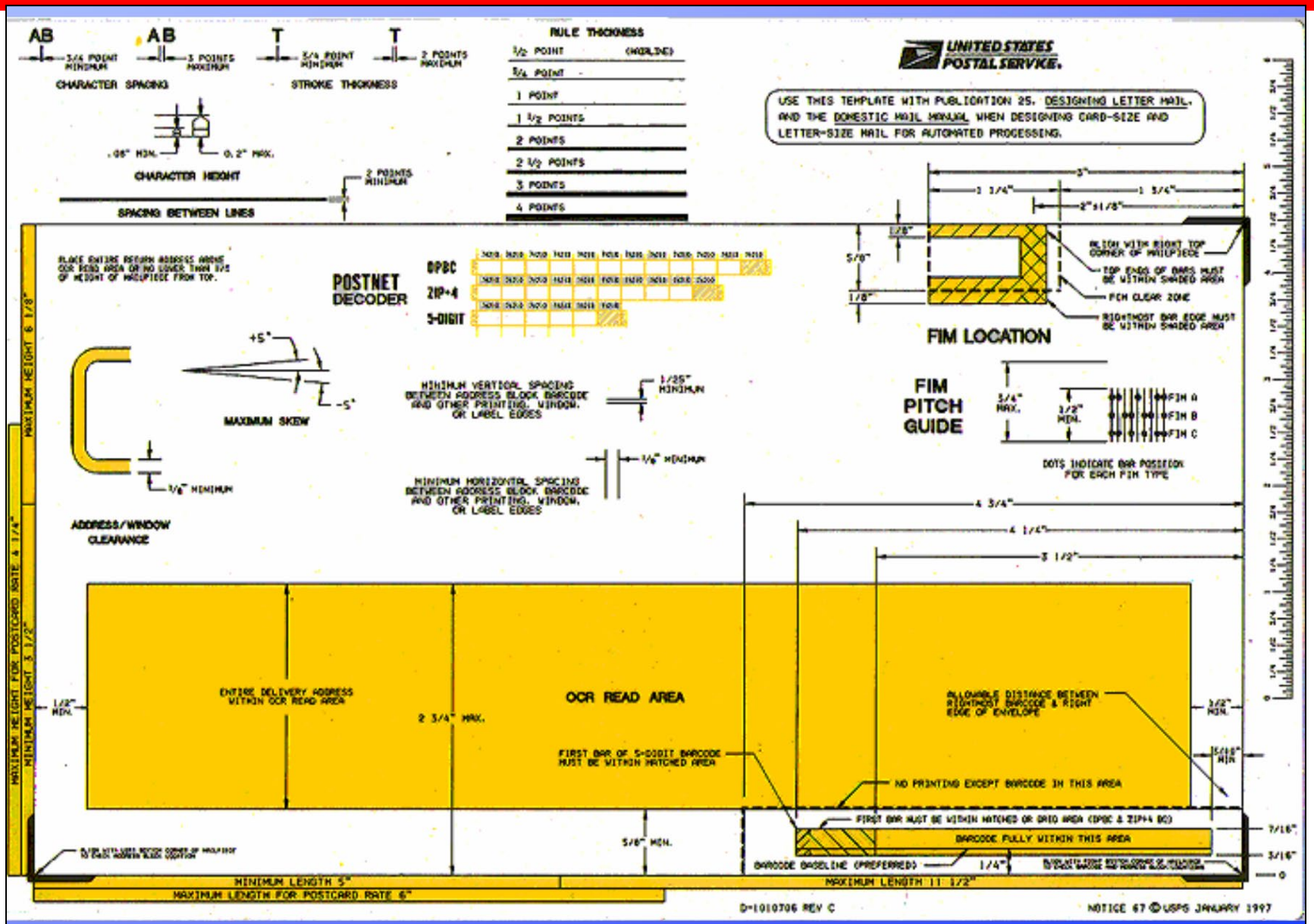
- Maximum weight for First Class and Standard automation letters is 3.5 ounces

UNITED STATES POSTAL SERVICE®

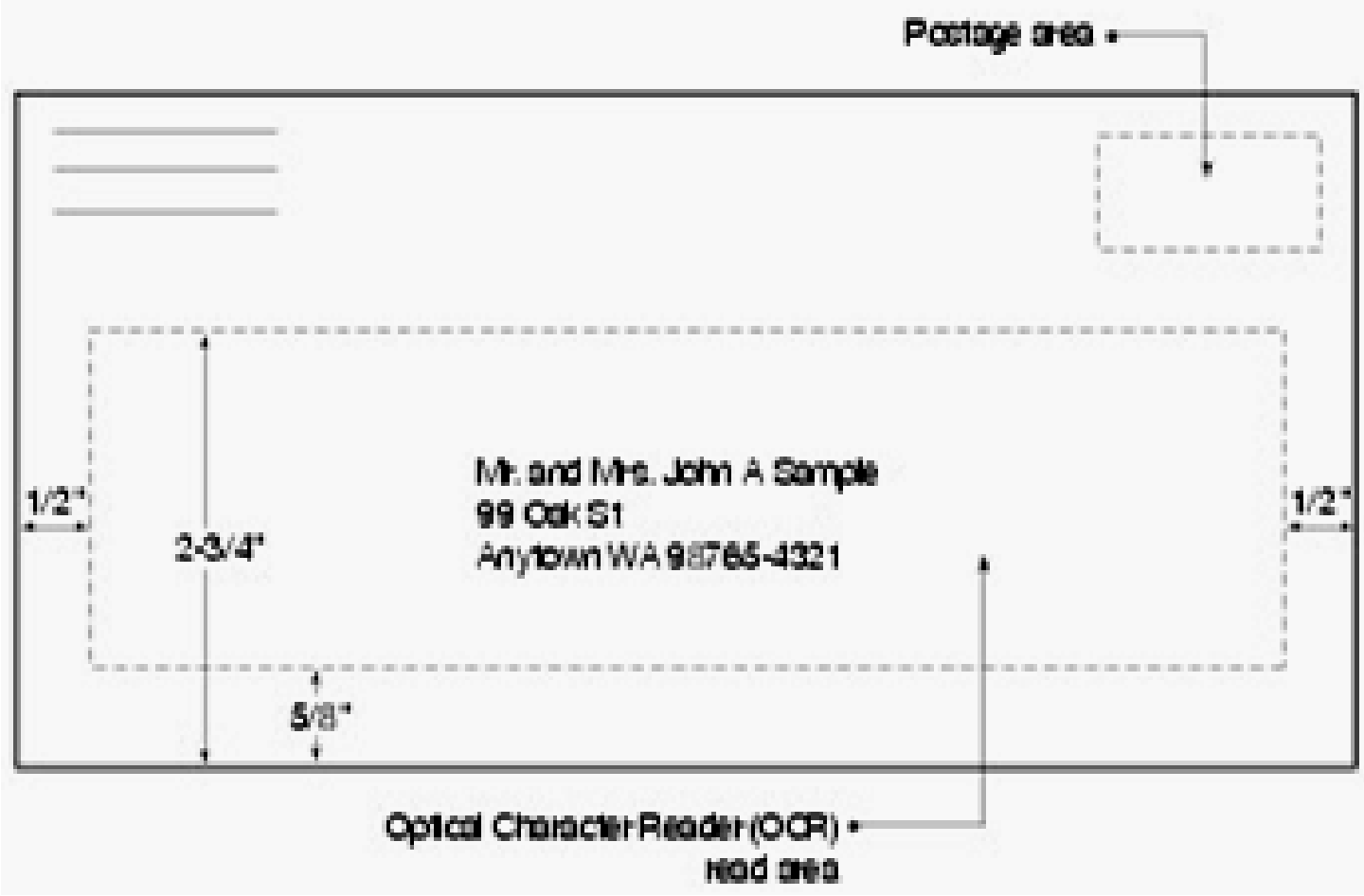
ADDRESS PLACEMENT



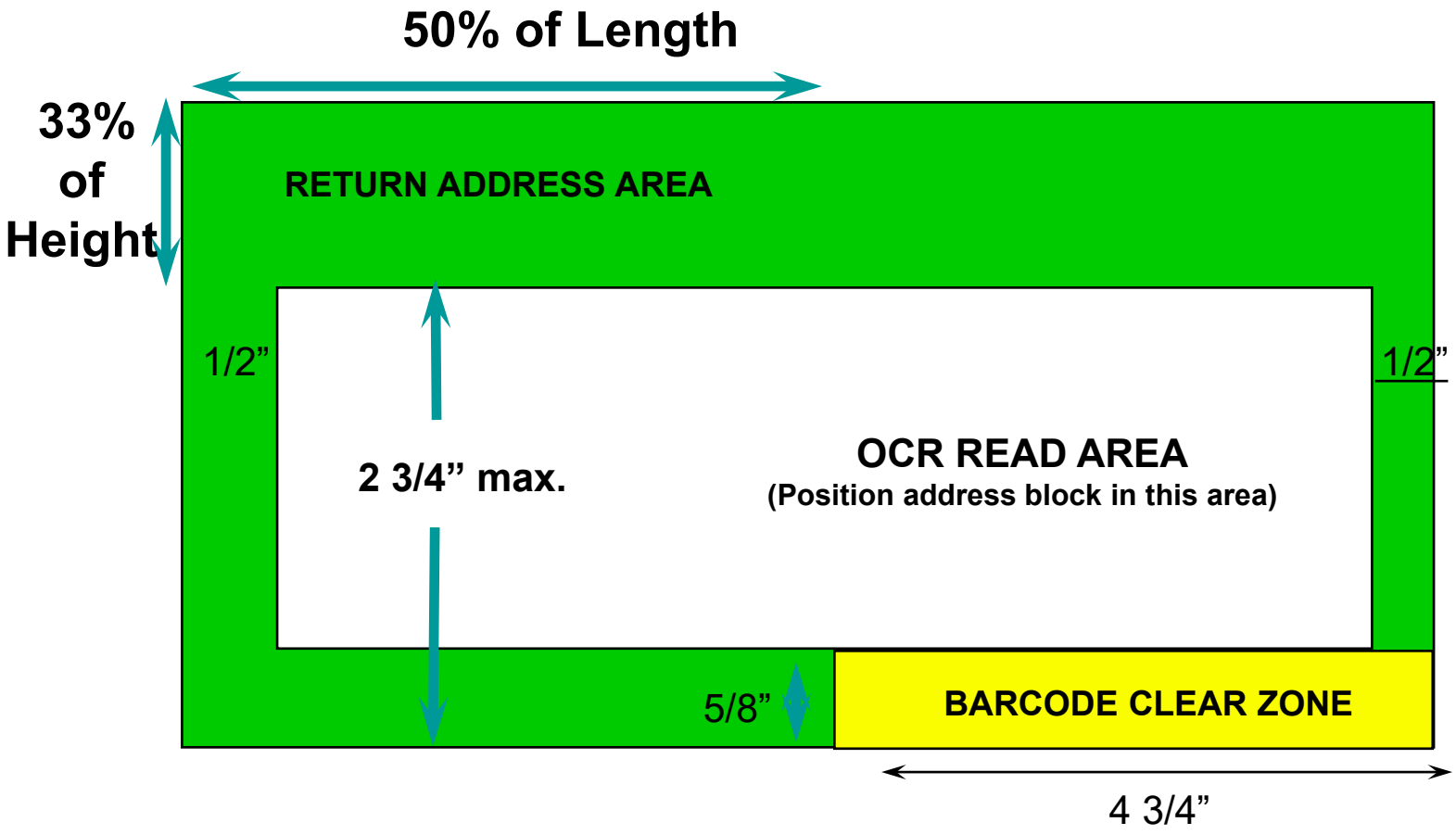
Notice 67


CHARACTER SPACING
STROKE THICKNESS
CHARACTER HEIGHT
SPACING BETWEEN LINES
RULE THICKNESS
USE THIS TEMPLATE WITH PUBLICATION 25, DESIGNING LETTER MAIL, AND THE DOMESTIC MAIL MANUAL WHEN DESIGNING CARD-SIZE AND LETTER-SIZE MAIL FOR AUTOMATED PROCESSING.
POSTNET DECODER
DPBC
ZIP+4
5-DIGIT
FIM LOCATION
FIM PITCH GUIDE
MAXIMUM SKEW
ADDRESS/WINDOW CLEARANCE
MINIMUM VERTICAL SPACING BETWEEN ADDRESS BLOCK BARCODE AND OTHER PRINTING, WINDOW, OR LABEL EDGES
MINIMUM HORIZONTAL SPACING BETWEEN ADDRESS BLOCK BARCODE AND OTHER PRINTING, WINDOW, OR LABEL EDGES
ENTIRE DELIVERY ADDRESS WITHIN OCR READ AREA
OCR READ AREA
ALLOWABLE DISTANCE BETWEEN RIGHTMOST BARCODE & RIGHT EDGE OF ENVELOPE
FIRST BAR OF 5-DIGIT BARCODE MUST BE WITHIN HATCHED AREA
NO PRINTING EXCEPT BARCODE IN THIS AREA
BARCODE FULLY WITHIN THIS AREA
BARCODE BASELINE (PREFERRED)
MINIMUM LENGTH 5"
MAXIMUM LENGTH FOR POSTCARD RATE 6"
MAXIMUM LENGTH 11 1/2"
D-1010706 REV C
NOTICE 67 © USPS JANUARY 1997

Address Placement - Letter



Address Placement



Non-Address Data	→	FELO 1225-66H
Information/Attention	→	KAREN MAGAZINO
Name of Recipient	→	NATIONAL POSTAL FORUM
Delivery Address	→	801 MOUNT VERNON PLACE NW
City, State, ZIP+4	→	WASHINGTON DC 20001-3614

Dual Delivery Addresses:
Mail will be delivered to →

GRAND PRODUCTS INC
100 MAJOR ST
PO BOX 200
NEW YORK NY 10001-0200

UNITED STATES POSTAL SERVICE®

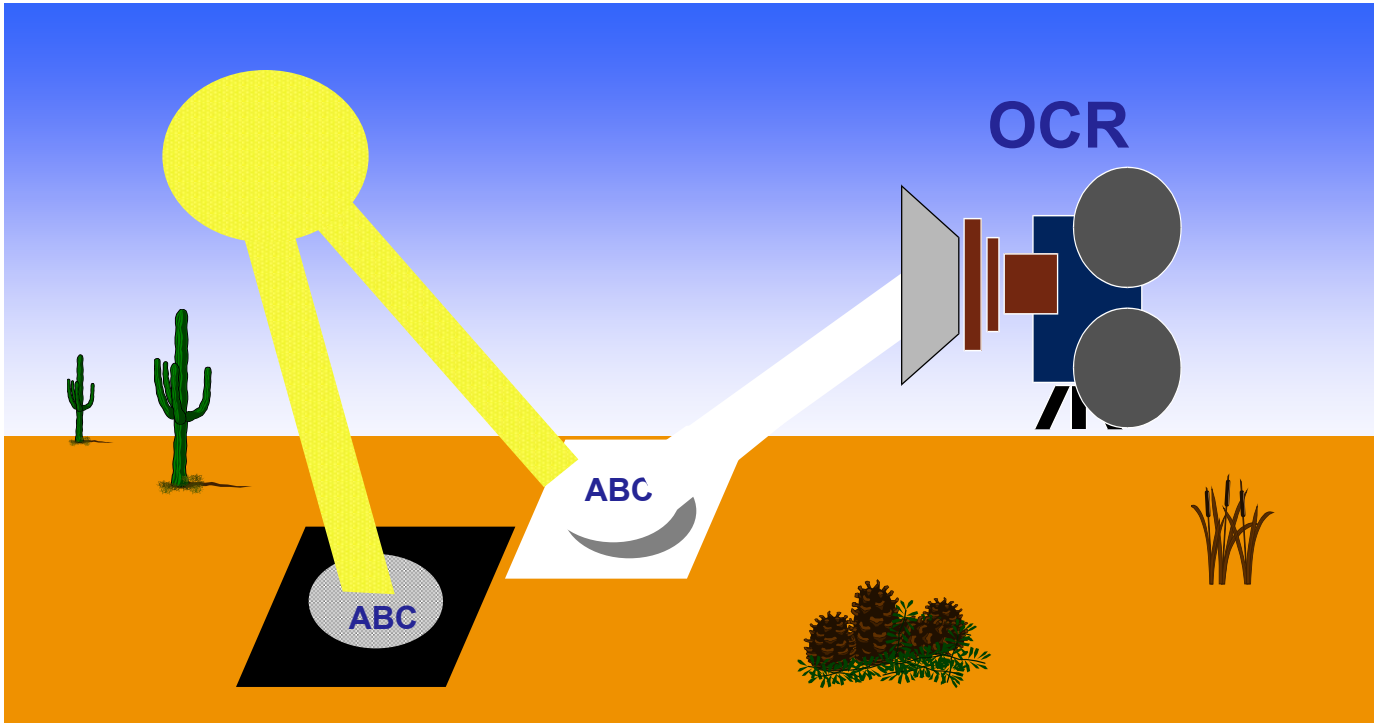
Fonts

- Some fonts are too small to be scanned successfully.
- Best font size is 10 or 12 points.
- A mix of upper and lower case letters requires a 12 point font to make the lower case letters large enough to scan.

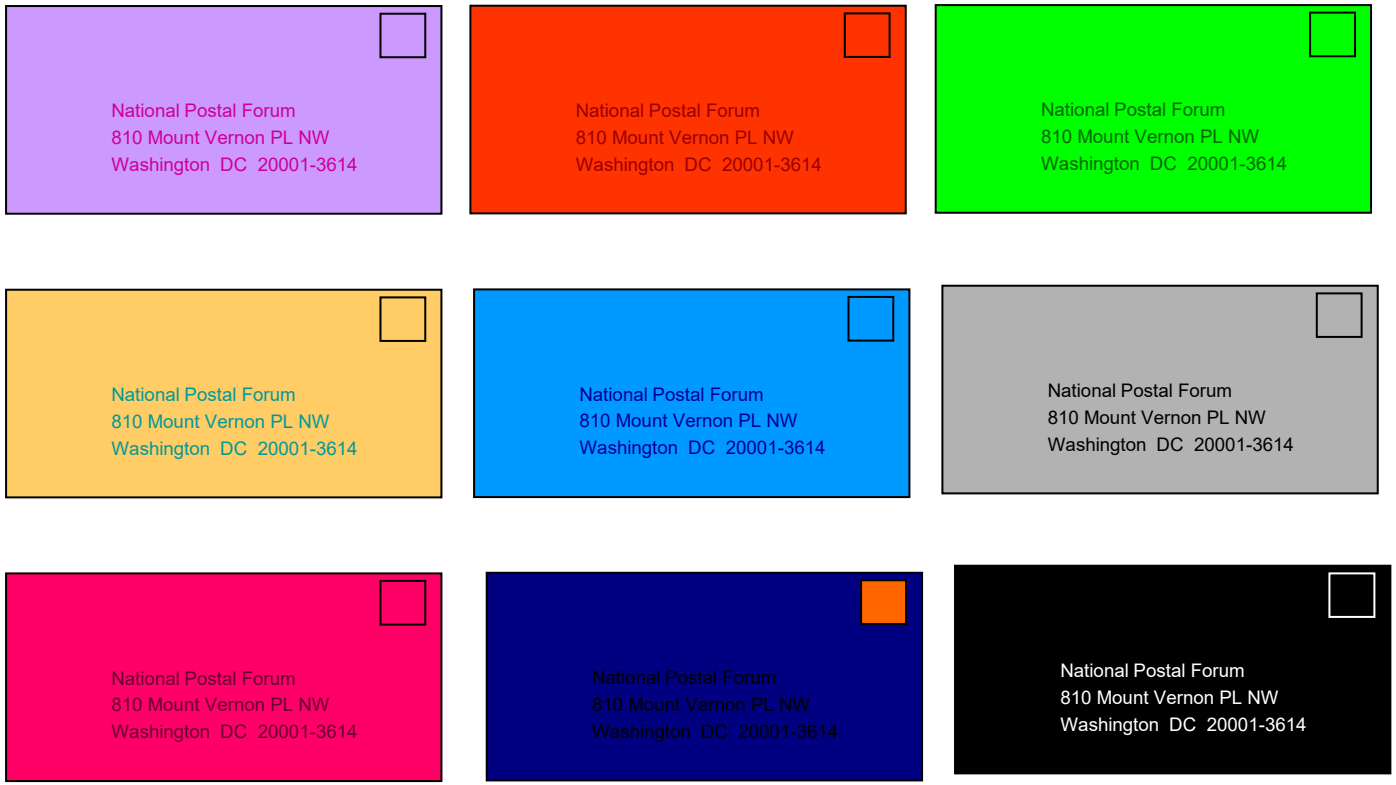
ADDRESS PRINTING GUIDELINES - FONTS

SANS SERIF:	**GOOD READABILITY**
SERIF:	NOT AS GOOD
BOLD:	**LINES TOO THICK**
CHARACTER SPACING:	T O O F A R A P A R T
Condensed type:	Irregular character shape & spacing
ITALIC:	*Overlapping letters*
DOT MATRIX	Gaps in characters if dots are too far apart

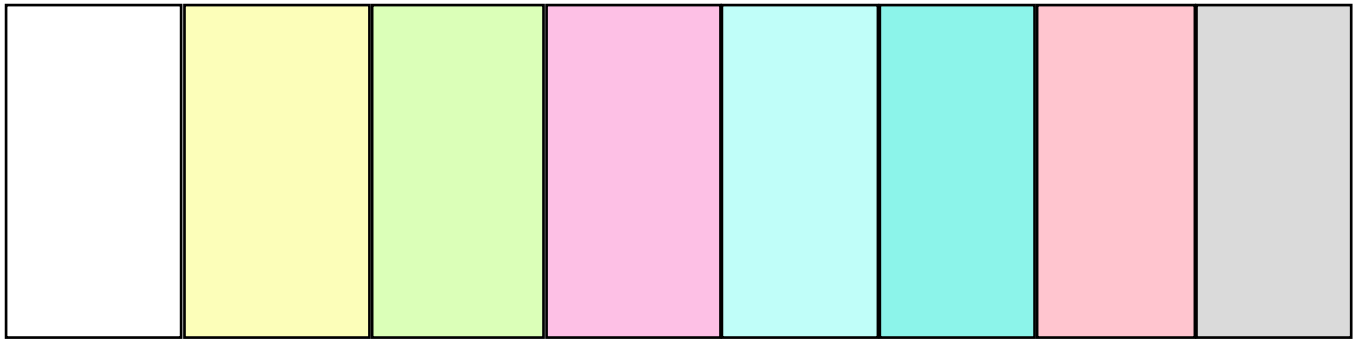
Reflectance



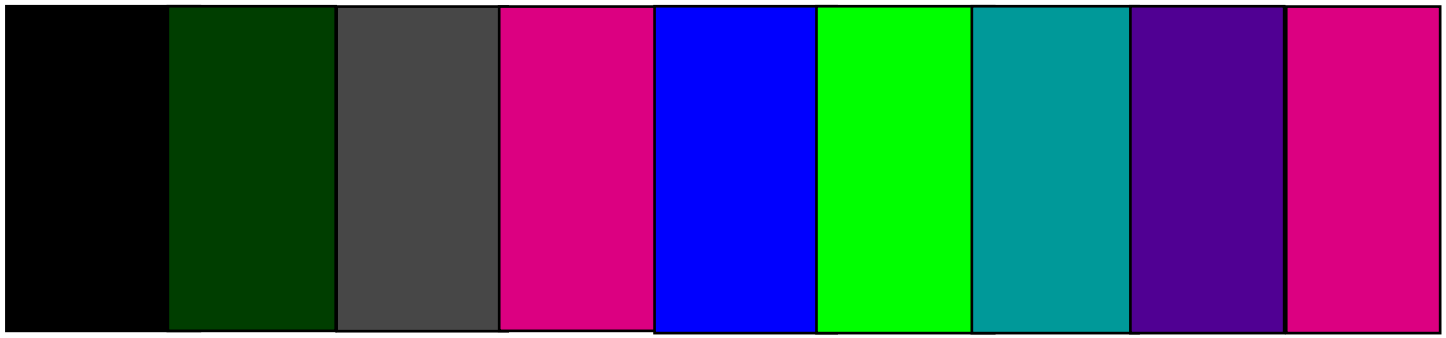
Print Contrast



PAPER COLORS



RECOMMENDED: LIGHT PASTELS, NEUTRALS = GOOD

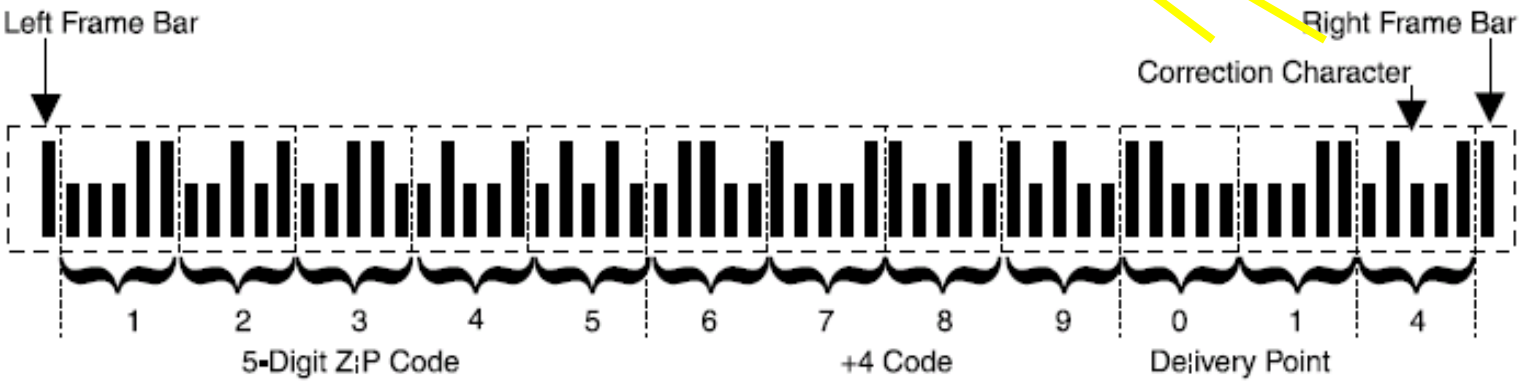


NOT RECOMMENDED: DARK, BRIGHT, BLACK, FLUORESCENT COLORED BACKGROUND = POOR

100% DELIVERY POINT BARCODED

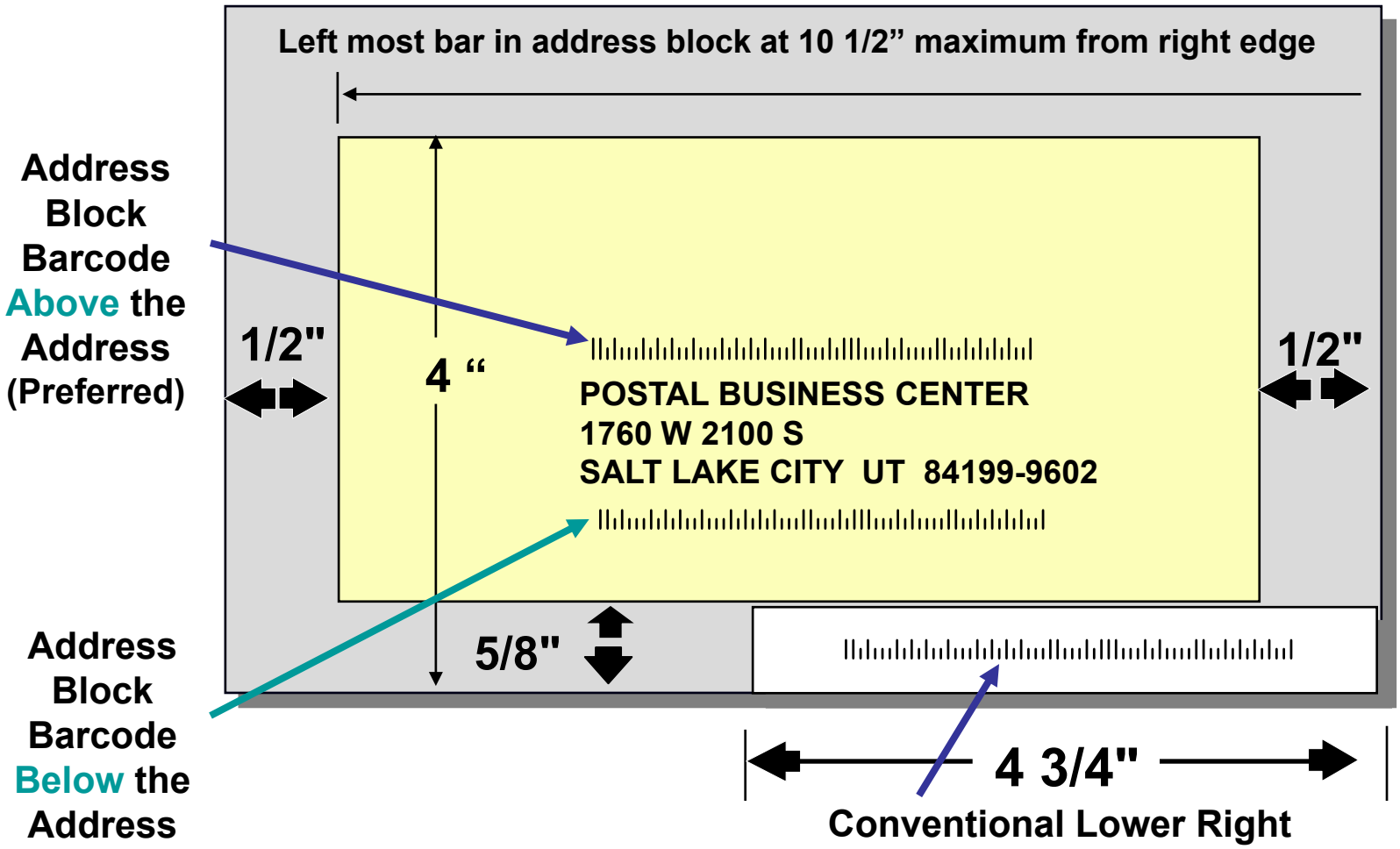
All letter-mail claimed at automation rates must have an accurate delivery point barcode.

JACK SMITH
101 MAIN ST
JACKSONVILLE FL 32241-3045

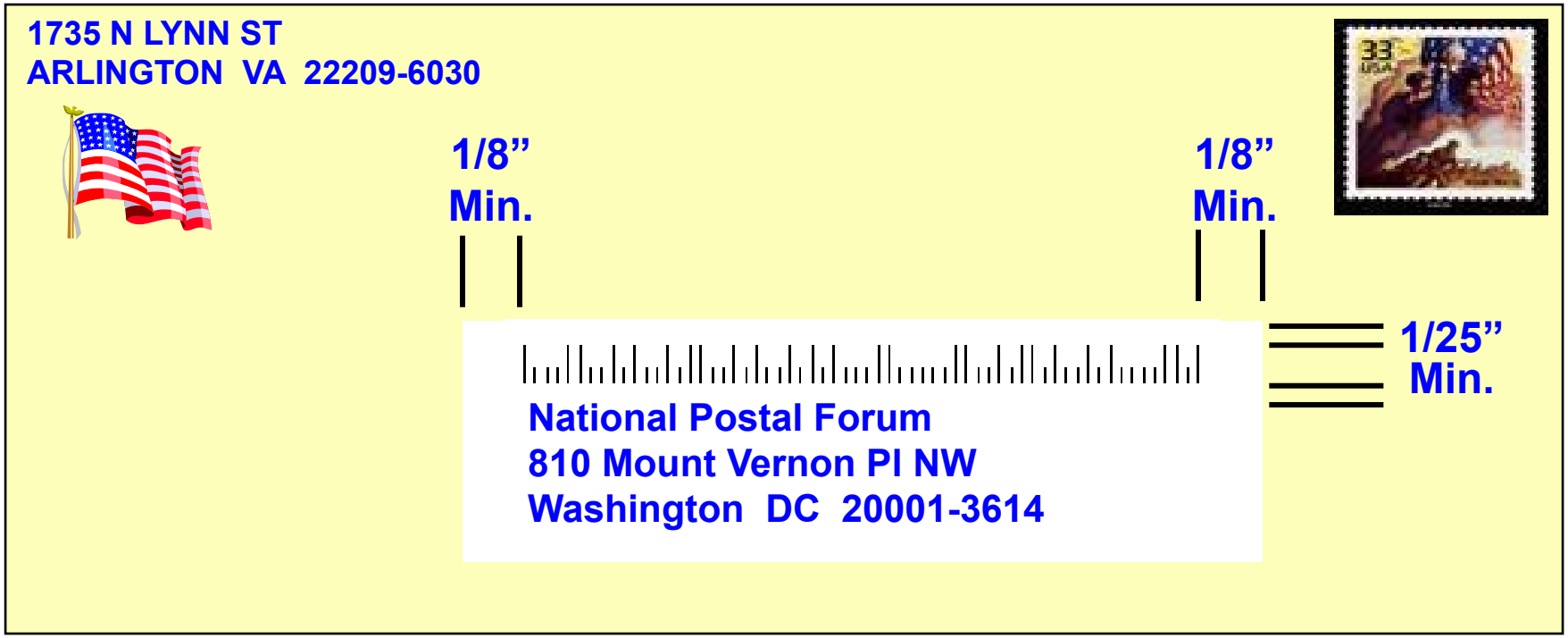


BARCODE PLACEMENT

3 DIFFERENT BARCODE LOCATIONS

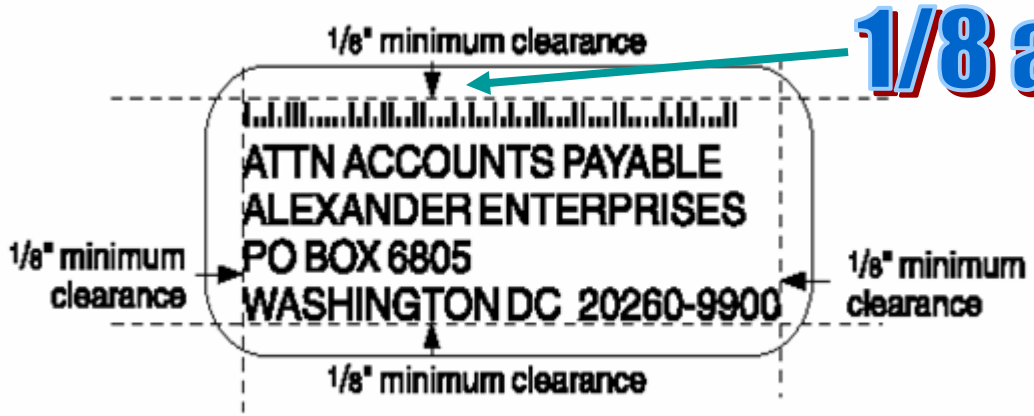


Postnet Barcode Building Quality
Barcode Clearance & Window Insert Shift

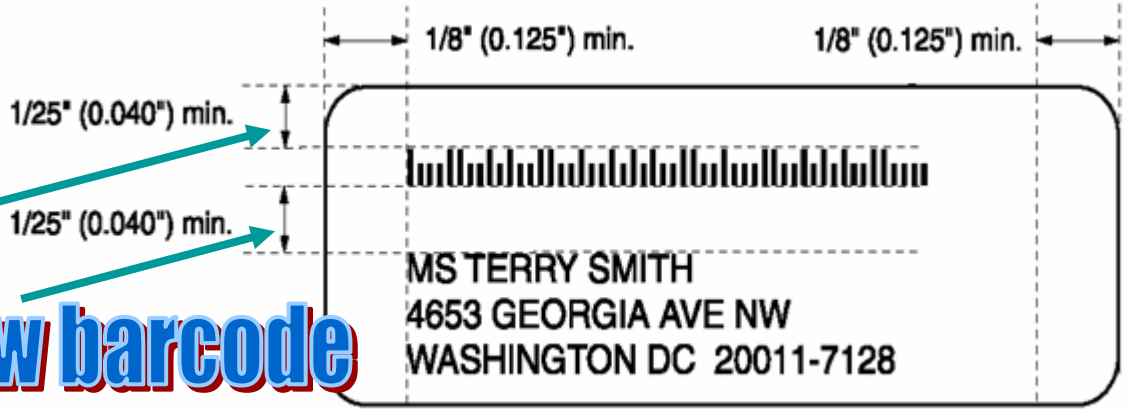


Allow a clear space of 1/8” to the left and right and 1/25” above and below between the barcode and printing to the window or label edge

Postnet Barcode Placement



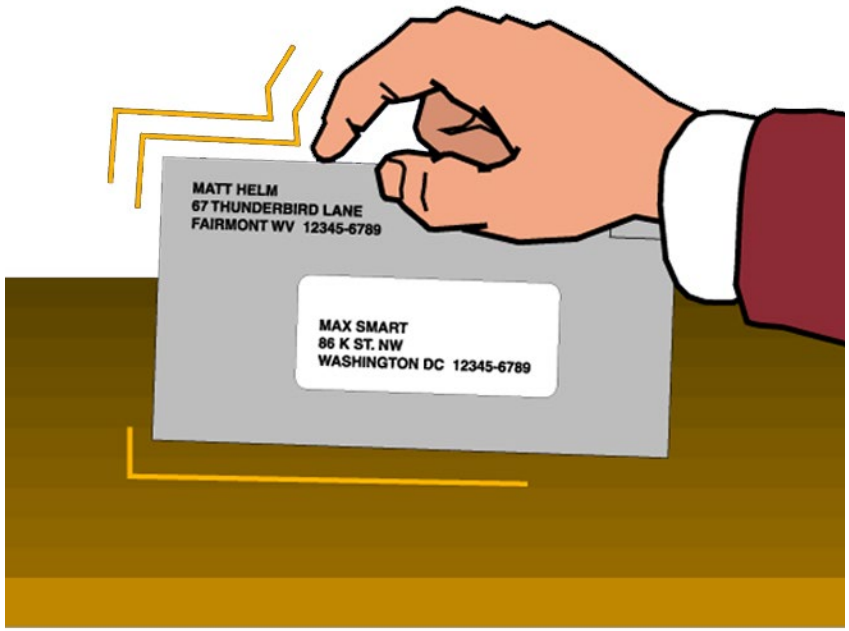
1/8 around window



1/25 above & below barcode

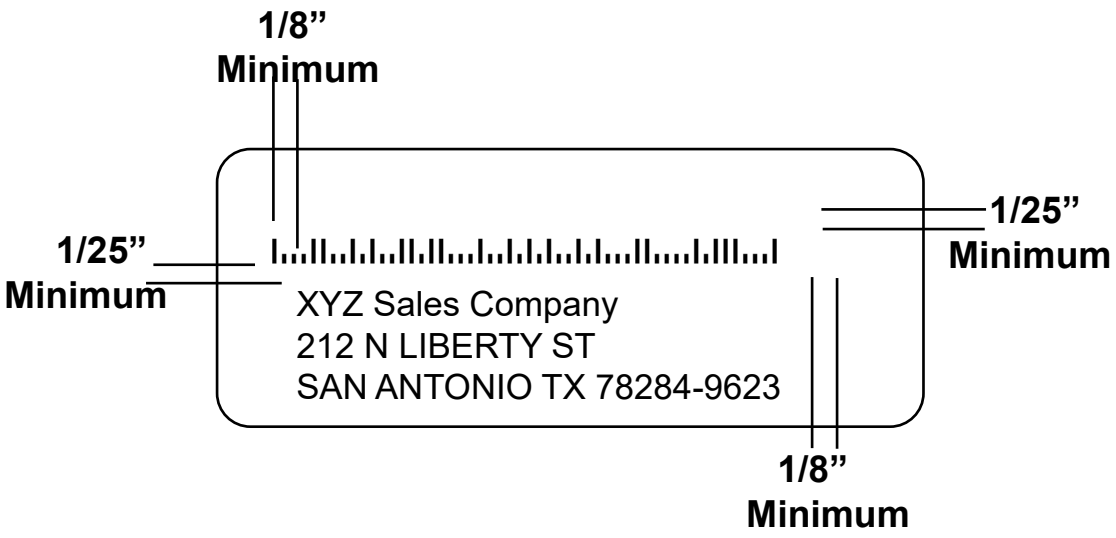
TAP TEST

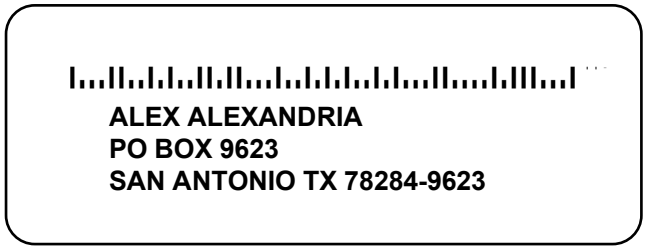
2 taps on bottom



Then 2 taps. on each end

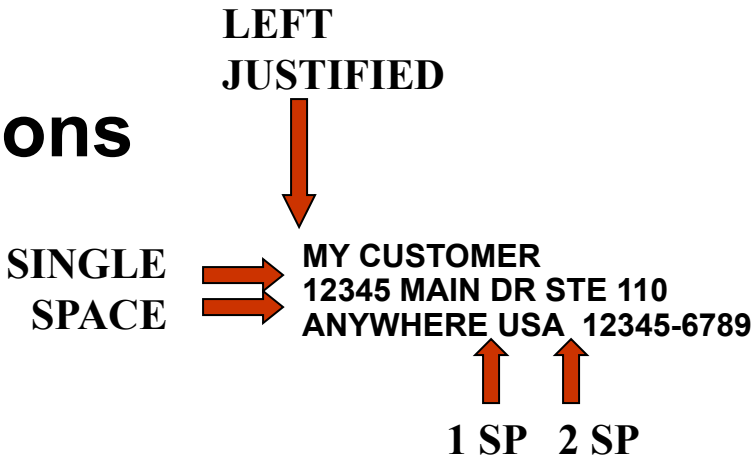
ADDRESS BLOCK BARCODE





STANDARDIZED ADDRESSING

1. *STANDARDIZED ADDRESSING* is one of the most important elements on a mailpiece.
   a. **Left-justified**
   b. **Standard abbreviations**



2. Proper Spacing
   a. **Proper Spacing Between:**
   b. **Characters Words Lines**
   c. **MLOCR require 2 points Lines Spacing**

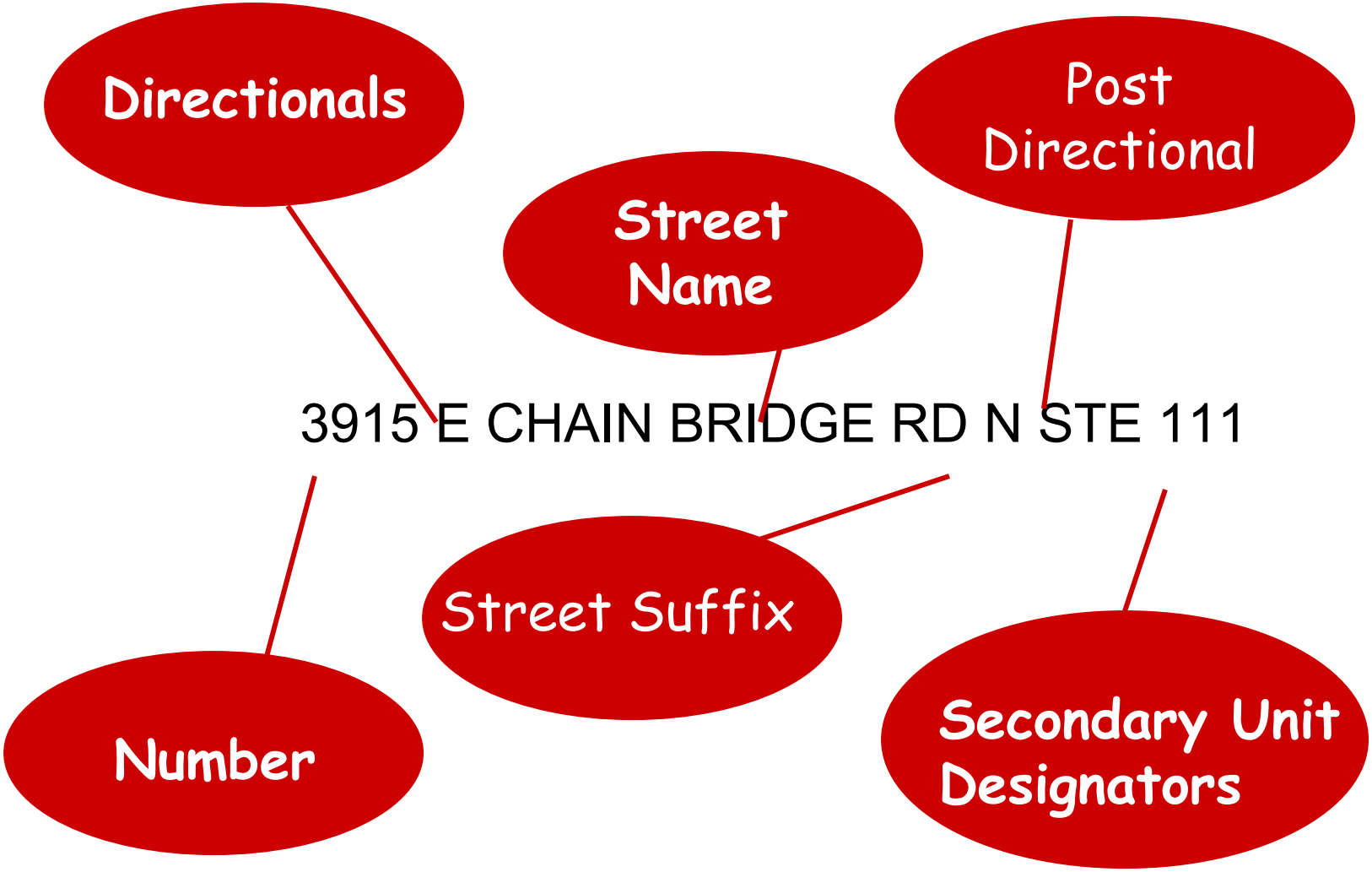
DMM 102, 202 Pub 25

ADDRESS FORMAT

PRSRT STD
U.S.POSTAGE
PAID
PERMIT NO 1
ANYTOWN US

NON-ADDRESS DATA →	#JAN00 000 CA#1508 LT 52
INFORMATION / ATTN →	MR J BROWN
RECIPIENT →	CENTRAL LIBRARY
DELIVERY ADDRESS →	3915 E CHAIN BRIDGE RD
CITY, STATE, ZIP CODE →	FAIRFAX VA 22030-3999

ADDRESS COMPONENTS



COMMERCIAL MAIL RECEIVING AGENCY

JANE DOE
RR 1 BOX 12 PMB 234
HERNDON VA 22071-2716

JOHN DOE
10 MAIN ST STE 11 #234
HERNDON VA 22071-2716

Include either PMB identifier or # followed by private mailbox number at CMRA mailing address

DUAL DELIVERY ADDRESS LINES

JANE DOE
301 SPYGLASS DR
PO BOX 1
EUGENE OR 97440-0001

JOHN DOE
PO BOX 1
301 SPYGLASS DR
EUGENE OR 97401-2092

ZIP Codes must match the address where mail will be delivered

New Address Standards for Commercial Flat-Size Mail

New Address Standards

New standards for the delivery address on commercial flats specify:

1. Minimum type size
2. Horizontal and vertical character spacing
3. Placement within the top half of the mailpiece

New Address Standards

New standards ensure readable addresses for:

1. Accurate sorting
2. Accurate delivery
3. Accurate redirection
4. Speedy service

Address Characteristics — Minimum Size

1. All presorted and carrier route flats must be addressed using at least 8-point type.
    a. Each letter or figure must be at least 0.080 inch high.

1. Flats using an 11-digit POSTNET or an Intelligent Mail barcode may use 6-point type if the address is printed in all capital letters.
    a. Each letter or figure must be at least 0.065 inch high.

Address Characteristics — Style

Two preferences for best read rates:

1. Sans-serif font.
2. ALL CAPITAL LETTERS.

Address Characteristics — Spacing

Additional standards for automation pieces only:

1. Address characters cannot overlap.
2. Address lines cannot touch or overlap (0.028-inch clearance preferred).
3. Address elements may be separated by no more than five blank spaces.

Address Placement

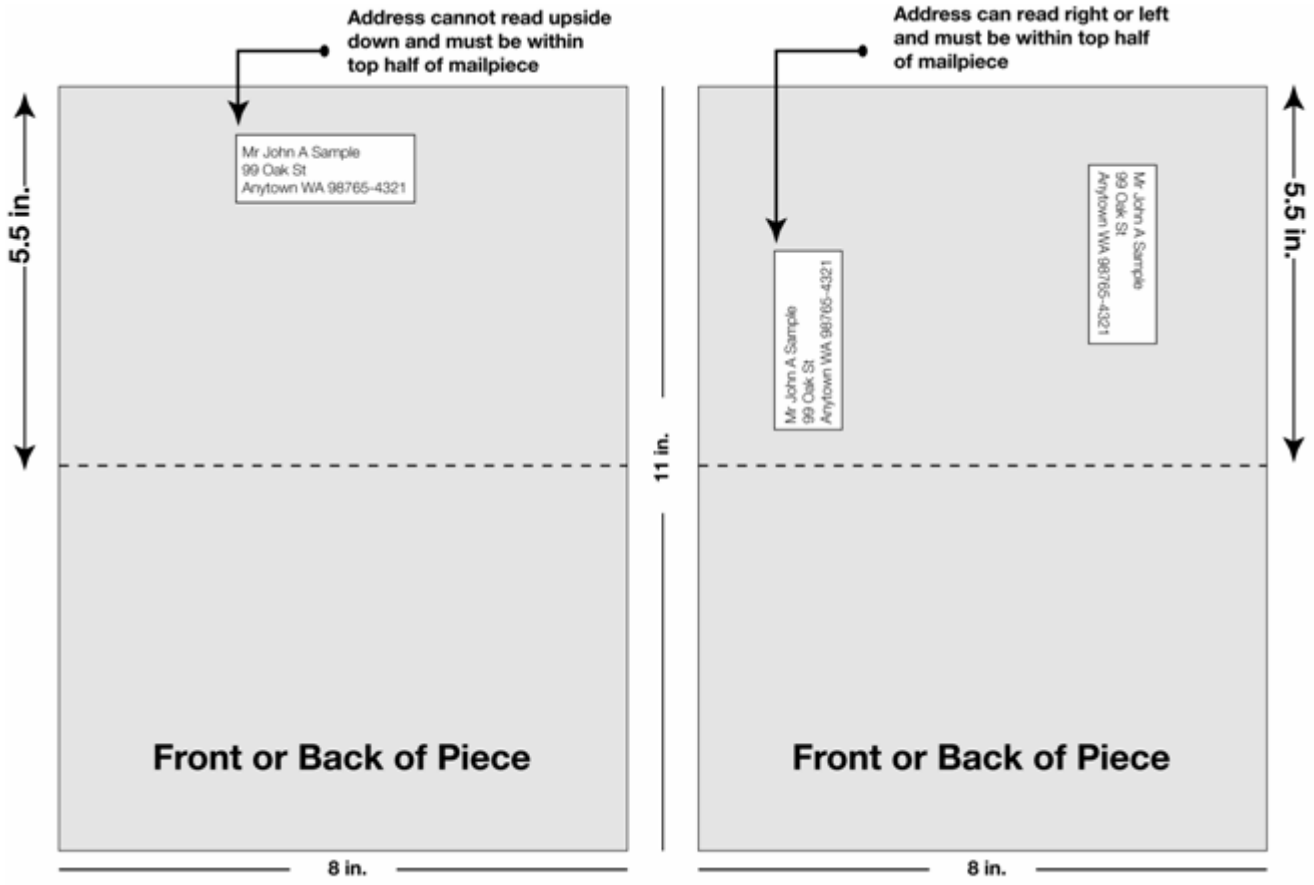
The new placement standards apply to all Periodicals, Standard Mail, and Package Services flats mailed at presort, carrier route, and automation prices.

They do not apply to First-Class Mail!

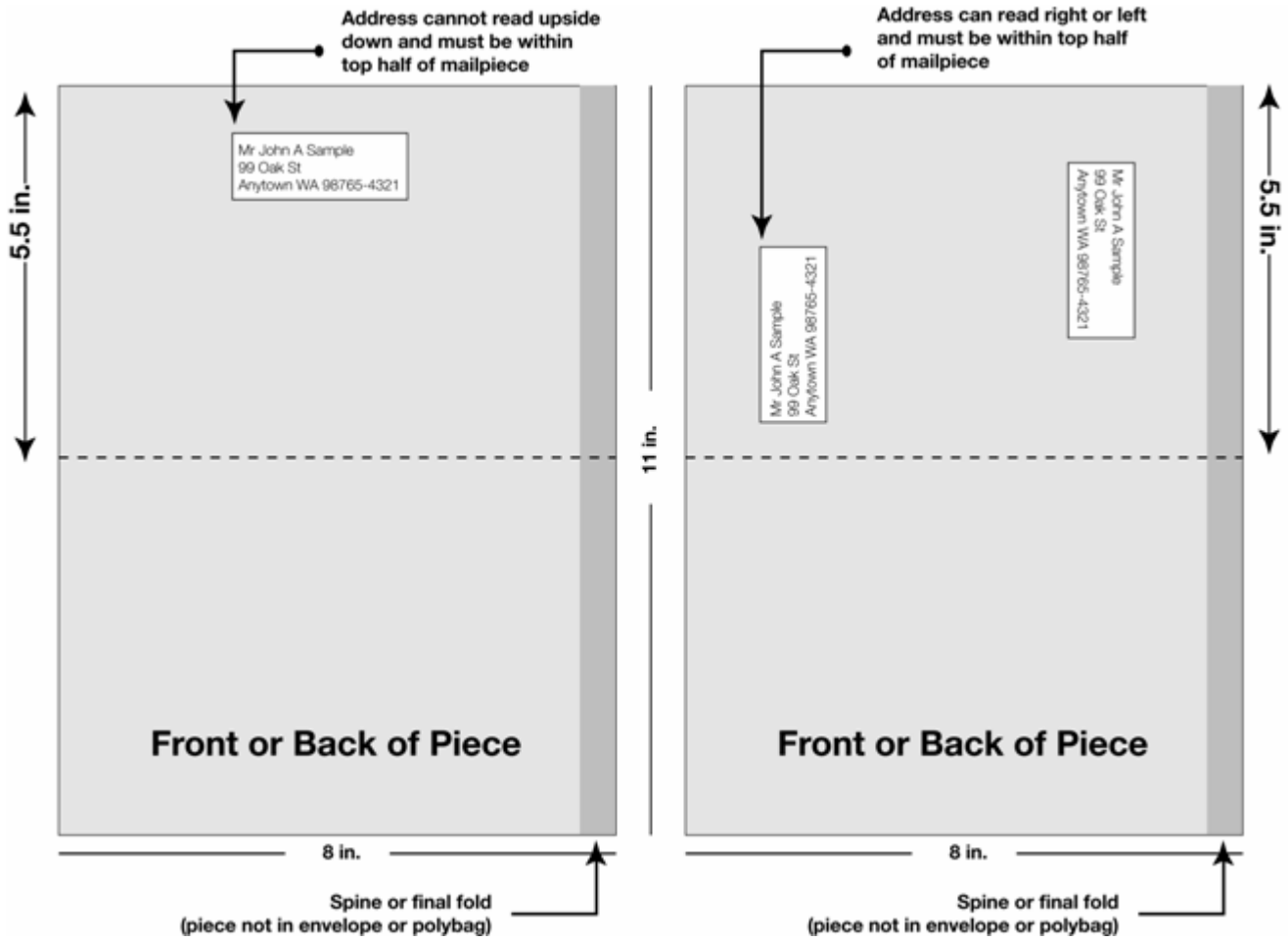
Address Placement

The delivery address must be entirely within the top half of the mailpiece.

Address Placement — Enclosed Flat



Address Placement — Unenclosed Flat



Address Placement

The “top” is:

1. Either of the shorter edges on enveloped or polywrapped pieces, and on all Carrier Route (or ECR) Saturation pieces.
2. The upper edge when the spine is placed on the right-hand side of an unenclosed piece.

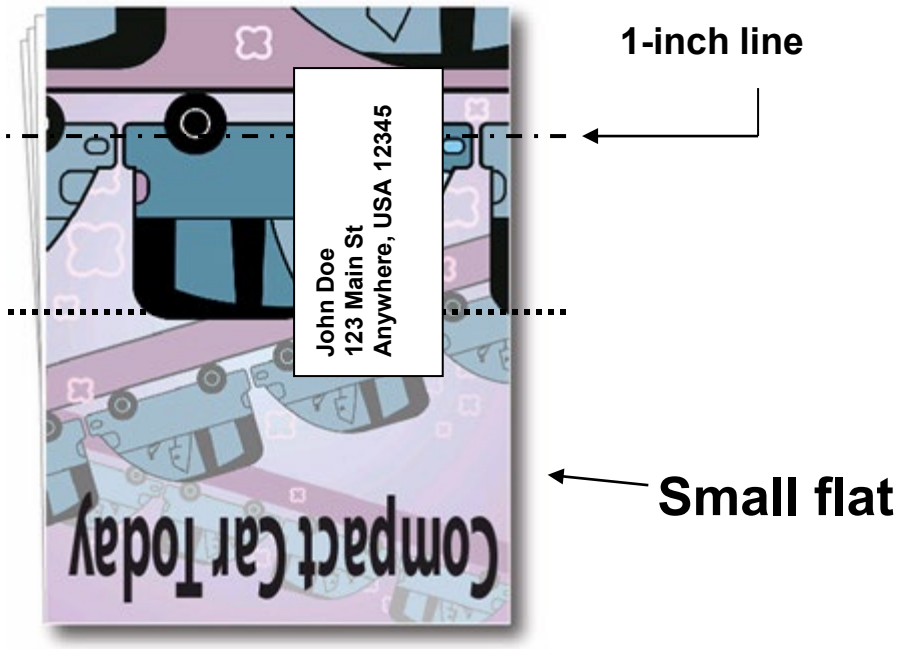
Address Placement

When the address is on a loose enclosure polywrapped with the host piece, at least the first half-inch of the address must remain within the top half throughout processing and delivery.

Address Placement

"Vertical" address may cross midpoint if it begins or ends within 1 inch of top edge.

Important for digests and other small flats.



Address Placement — Catalog

Example

Top half

Bound edge

Usually addressed on back cover:

Address Placement — Magazine

Example

Usually addressed on front cover:

Address Placement — Magazine in Polywrap

Example

Top half

1/2-inch line

Often addressed on a loose enclosure:

Address Placement — Large Envelope
Examples

Horizontal format is fine:

Address Placement — Magazine

Recap

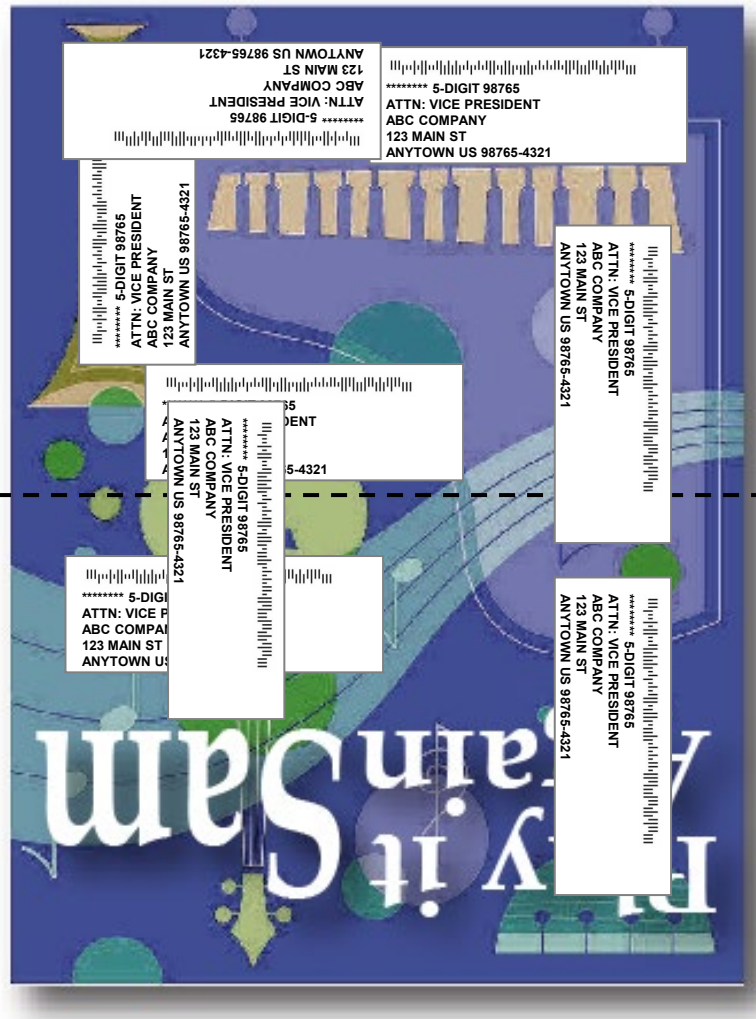
Yes

Yes

Yes

Yes

Top half



No

Bound edge

No

No

No

Address Placement — Catalog

Recap

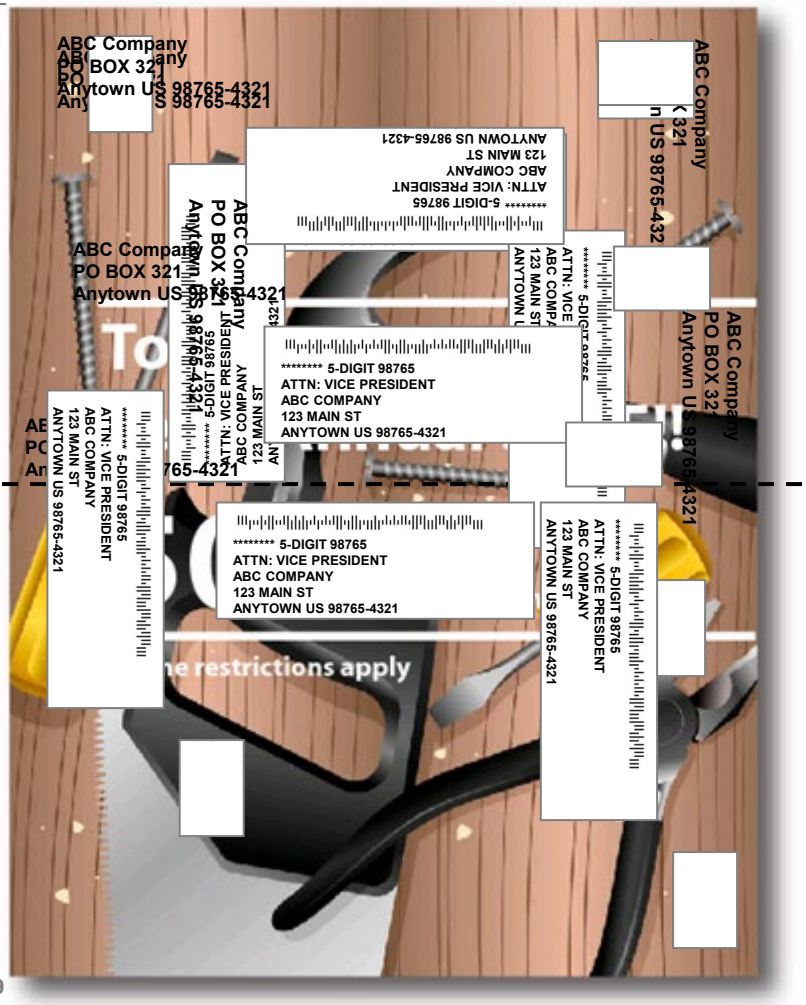
Yes

Yes

Yes

Yes

Top half



No

Bound edge

No

No

No

FAQs

1. The new standards DO apply to pieces mailed at flats prices because of weight or thickness.
2. The new standards DO NOT apply to letter, NFM, or parcel mailings. They DO NOT apply to single-piece mail.
3. Optical character readers DO read the delivery address on barcoded pieces.

The Intelligent Mail® Services Barcode

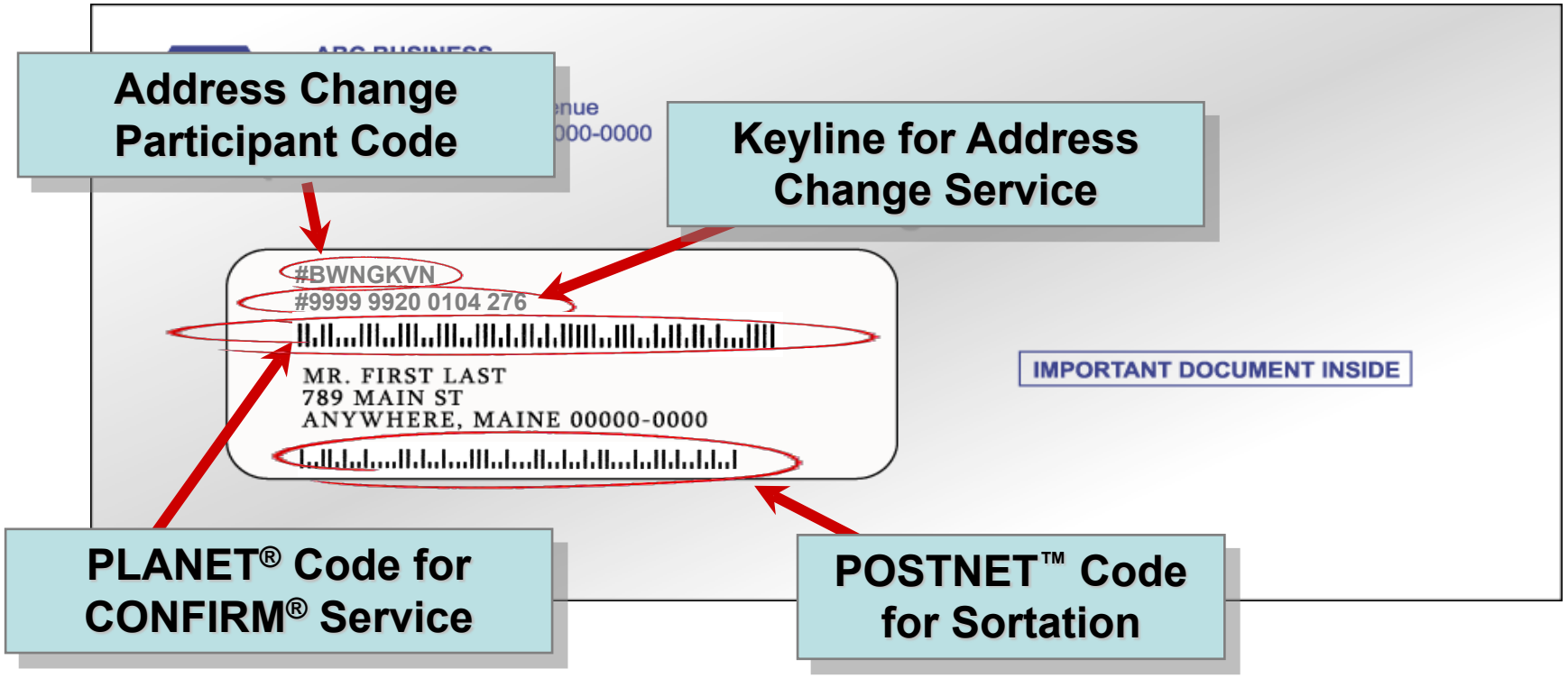
Introduction to Barcodes

1. The Intelligent Mail® barcode for mailpieces is a 31-character data string that converts into 65 bars of 4 different heights.
2. It allows mailers to use a single barcode to participate in multiple Postal Service programs, expands their ability to track individual mailpieces, and provides greater mailstream visibility.
3. The Intelligent Mail barcode can be applied on automation-rate First-Class Mail®, Standard Mail®, Periodicals, and flats for rate eligibility in lieu of the POSTNET™ barcode.
4. The Intelligent Mail barcode can also be used for Confirm® Service, referred to as OneCode Confirm™ and a version of Address Change Service (ACS™) called OneCode ACS™.

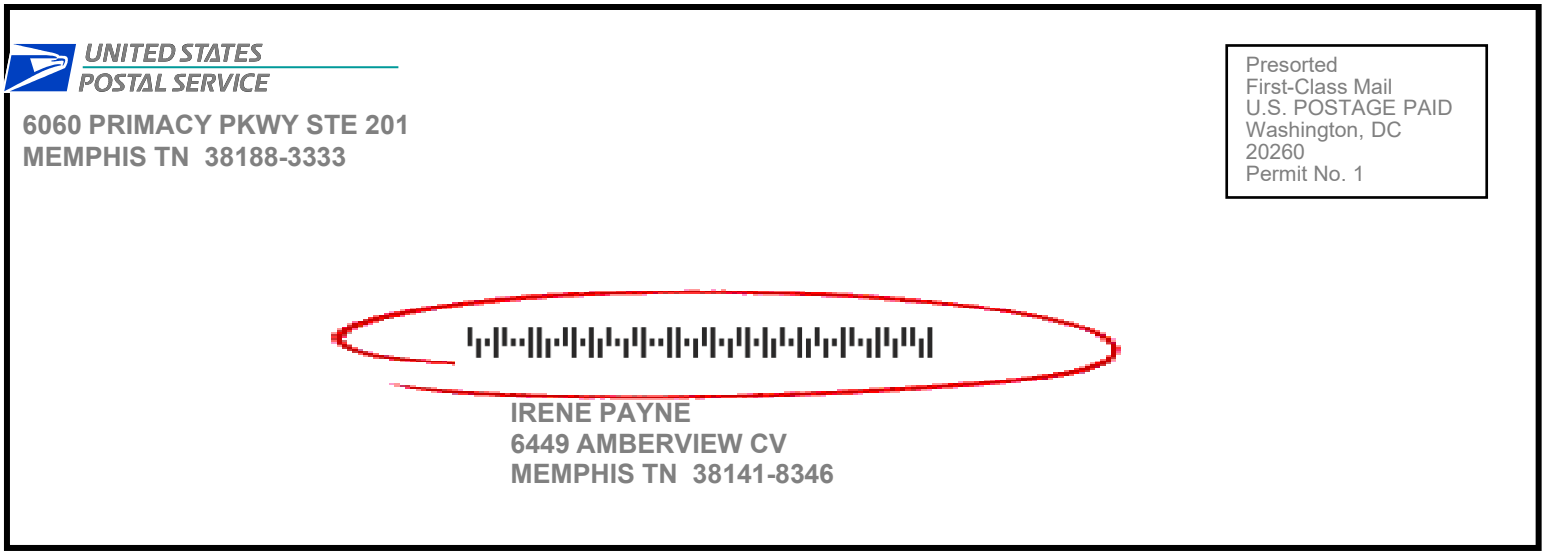
Intelligent Mail Barcode

Intelligent Mail® Barcode for Mailpieces

1. As the Postal Service introduced services such as CONFIRM® for tracking and Address Change Service for change of address notification, more information needed to be printed on the mailpiece
2. With all this extra information, the mail piece was cluttered and in need of a serious makeover



Mailpiece with Intelligent Mail Barcode



One Barcode

- Sortation
- Address Correction
- Tracking

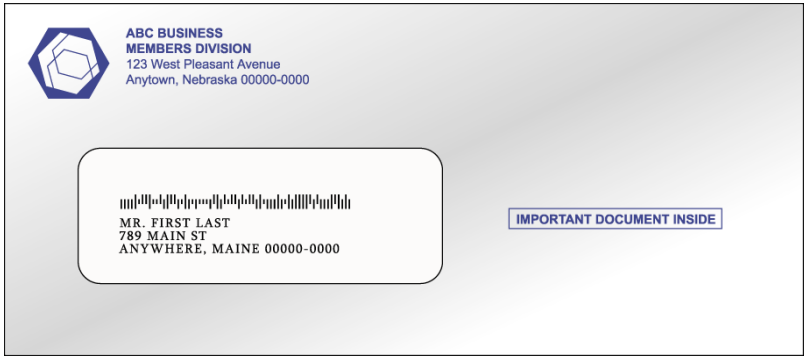
Intelligent Mail® Barcode Placement

1. Placement on letters
   a. Address block **or**
   b. Barcode clear zone
2. Placement on flats
   a. On address side **and**
   b. At least 1/8 inch from any edge of the piece
3. Only one barcode can be placed in the same area
4. Placement configurations of the IM barcode on a letter-size and flat-size mail are defined in the Domestic Mail Manual (DMM)™

Intelligent Mail® Barcode

Barcode ID	Service Type	Mailer ID	Serial Number	Routing Code
Ex: "00" for Mixed AADC	*Ex: "700" for First-Class Mail®*	*Ex: "123456" USPS® assigned*	Ex: "200800001" Mailer assigned	*Ex: 6449 Amberview Ct., Memphis, TN 38141834649*

- ✓ Barcode ID with Optional Endorsement Line
- ✓ Service Type
- ✓ **Mailer ID**
- ✓ ***Unique* Serial Number**
- ✓ Delivery Point ZIP Code®



Intelligent Mail® Barcode Content

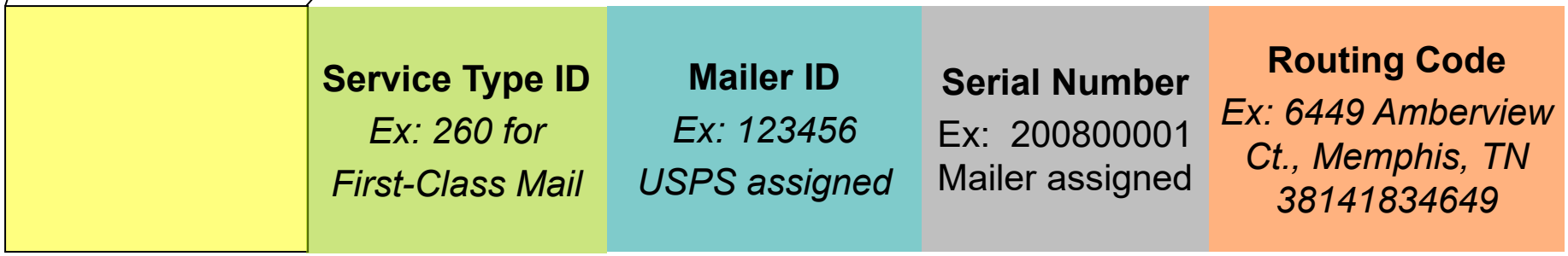
- Difference between Basic and Full-Service
  - Basic
    - Requires the Intelligent Mail® barcode on mailpieces (letters and flats)
  - Full Service
    - Requires the Intelligent Mail® barcode on mailpieces (letters and flats)
    - Unique barcode maintained for at least 45 days
    - Electronic documentation

Barcode ID	**Service Type**	**Mailer ID**	**Serial Number**	**Routing Code**
Ex: 50	*Ex: 260 for*	*Ex: 123456*	Ex: 200800001	*Ex: 6449 Amberview Ct., Memphis, TN 38141-8346*
for Mixed AADC	*First-Class Mail*	*USPS assigned*	Mailer Assigned	***38141834649***

Intelligent Mail® Barcode ID

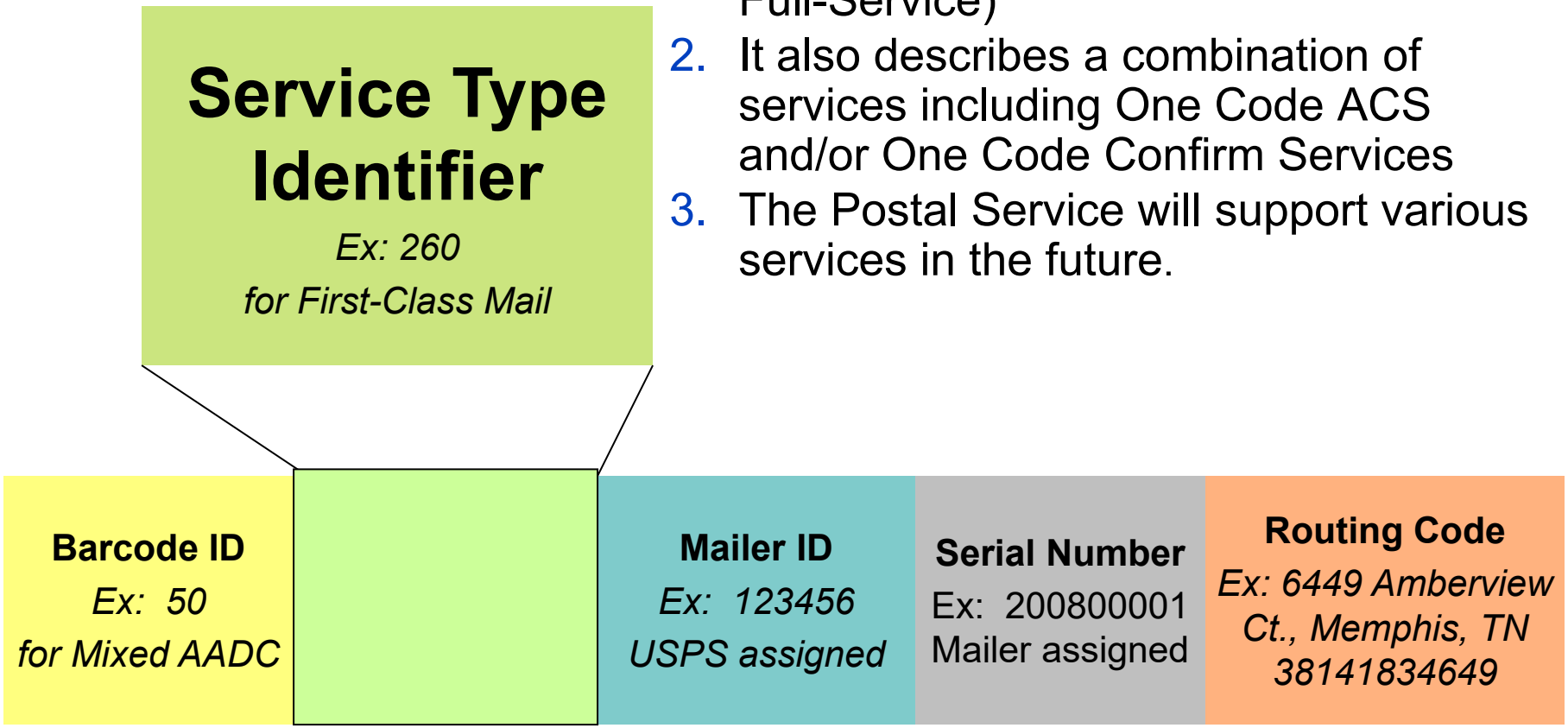
Barcode ID
Ex: 50
for Mixed AADC

1. A 2-digit field that corresponds to the type of barcode
2. For flat-size mail, it designates the Optional Endorsement Line (OEL)



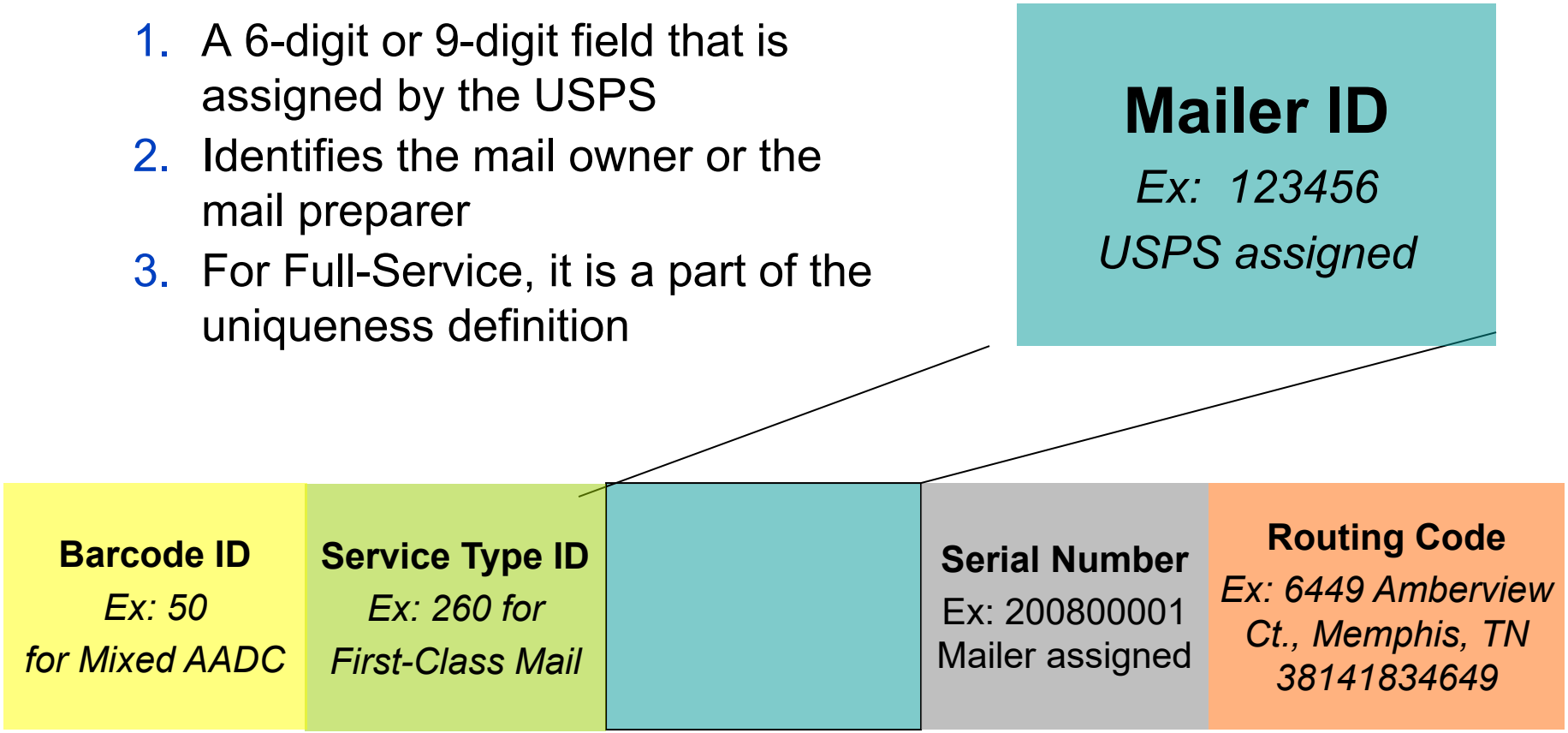
Intelligent Mail® Barcode Service Type Identifier

1. A 3-digit field that corresponds to the mail class and service level (Basic or Full-Service)
2. It also describes a combination of services including One Code ACS and/or One Code Confirm Services
3. The Postal Service will support various services in the future.



Intelligent Mail® Barcode Mailer ID

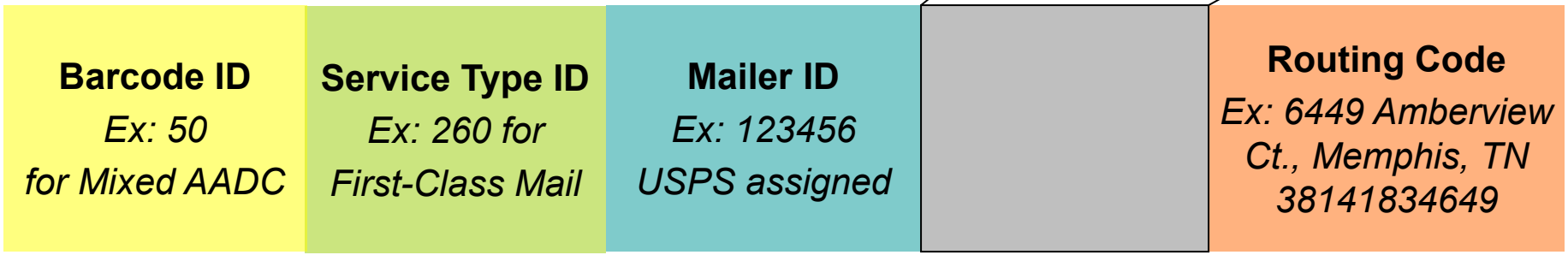
1. A 6-digit or 9-digit field that is assigned by the USPS
2. Identifies the mail owner or the mail preparer
3. For Full-Service, it is a part of the uniqueness definition



Intelligent Mail® Barcode Serial Number

1. A 6 or 9-digit field that is defined by the mailer
2. For Basic it can be static
3. For Full-Service, it must be variable and is a part of the uniqueness qualification
   a. May be sequential or non-sequential

Serial Number
Ex: 200800001
Mailer assigned

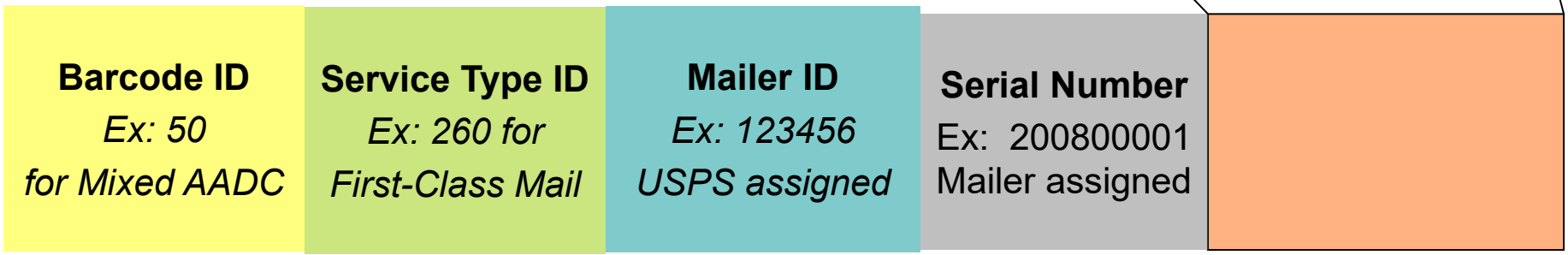


Intelligent Mail® Barcode Routing Code

- 11-digit field that corresponds to the Delivery Point Barcode—currently the POSNTET barcode
- Non-automation; may have 9 or 5 digits or no data in this field

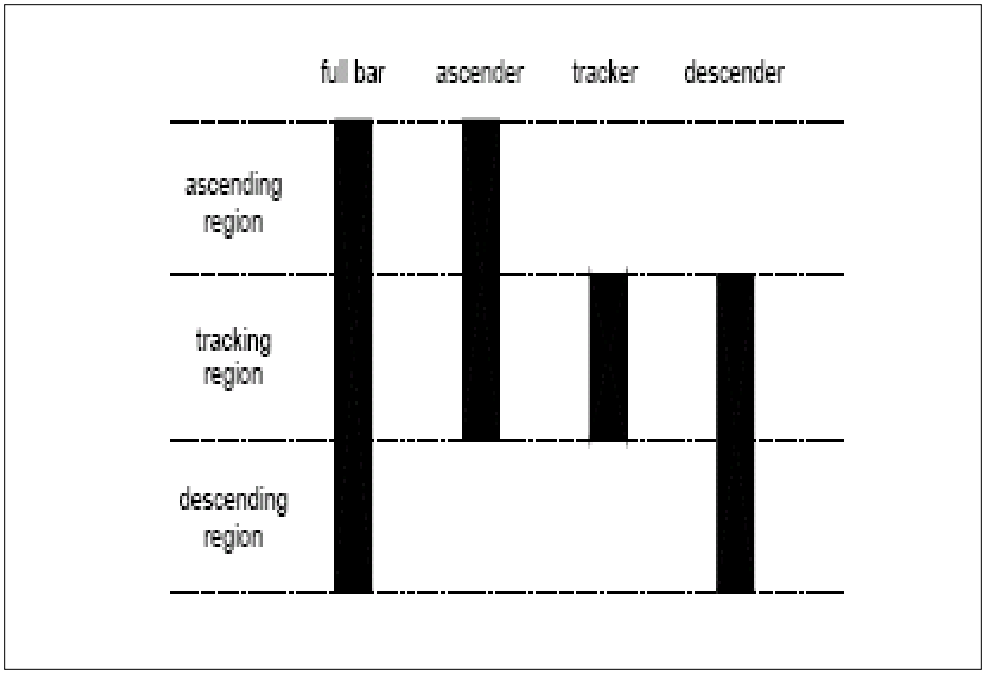
Routing Code

Ex: 6449 Amberview Ct., Memphis, TN 38141834649



Intelligent Mail® Barcode Specifications

1. For letters and flats
2. Height-modulated barcode
3. Uses 4-state symbology
4. **F**ull bar, **A**scender, **T**racker, and **D**escender

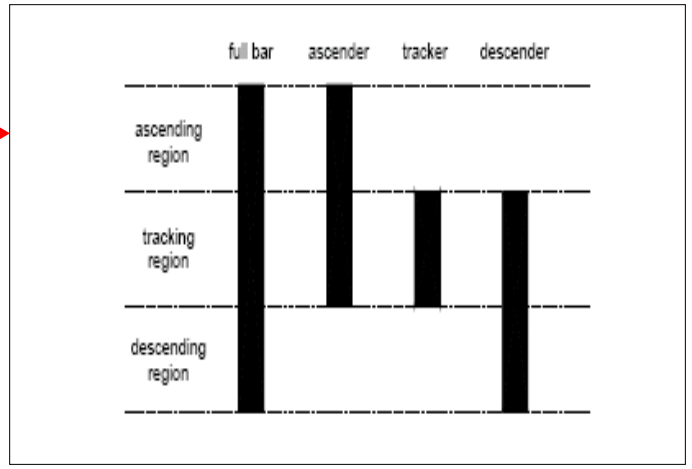


F A T D

Intelligent Mail Barcode : Specifications

1. For Letters and Flats
   a. Height-modulated barcode
   b. Full bar, Asender, Tracker, and Desender
2. Key Barcode Tolerance
   a. Overall length between 2.667 and 3.225 inches
   b. Overall height between 0.125 and 0.165 inches
   c. Vertical clear zone at least 0.028 inch

F A T D



Attribute	11-digit POSTNET	13-digit PLANET	Intelligent Mail Barcode
Number of bars	62	72	65
Horizontal Pitch	22 ± 2 bars per inch	22 ± 2 bars per inch	22 ± 2 bars per inch

Move Update

Over 40 million Americans change addresses annually.

You must have a move update mechanism in place to obtain new addresses.

Move Update Requirement

The **Move Update standard** is a means of reducing the number of mailpieces in a mailing that require forwarding or return.

Mailers who claim **presorted or automation rates for First-Class Mail** must demonstrate that they have updated their mailing list within 95 days before the mailing date.

January 2010, Standard Mail was included.

Move Update Methods

- NCOA^Link ®^ (Change-of-Address)
- FAST*forward* ®
- ACS ™ – Address Change Service
- Intelligent Mail ® – OneCode ACS ™
- Ancillary Service Endorsements
- Alternative Methods (First-Class Mail Only)

National Change of Address (NCOA$^{LINK®}$)

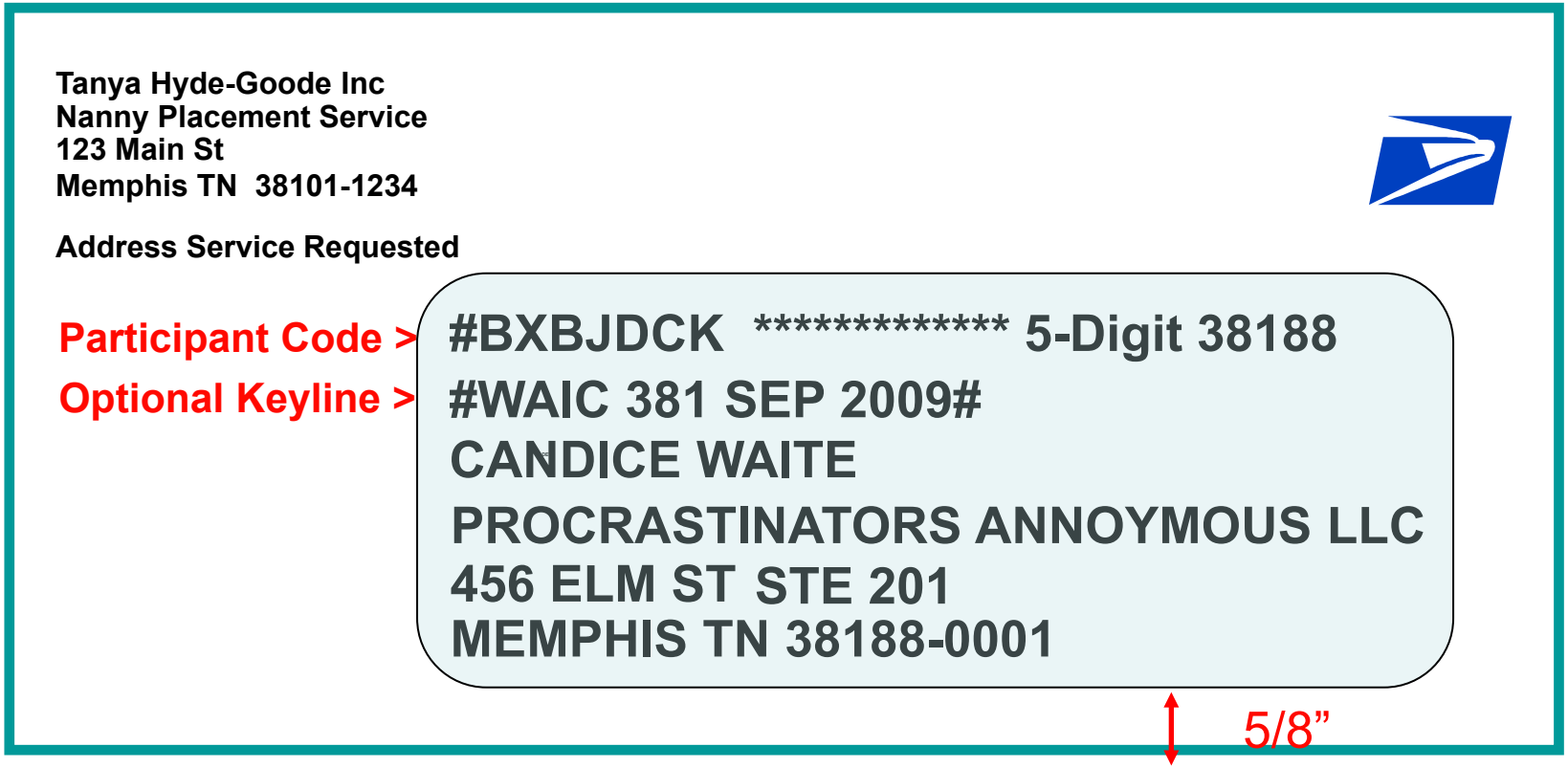
- Expands mailer's accessibility to USPS® national Change-Of-Address
- Provides electronic Change-of-Address information **prior** to mailing

.

Address Change Service (ACS™ - Traditional)

- Post-Mailing Service – Provides electronic COA Notices for undeliverable mailpieces
- Mailers apply a Participant Code and an Optional Keyline to each mailpiece
- Participant Code assigned for each class of mail
- Using ACS customers can reduce cost associated with manual keying of data

Example of An ACS™ Mailpiece

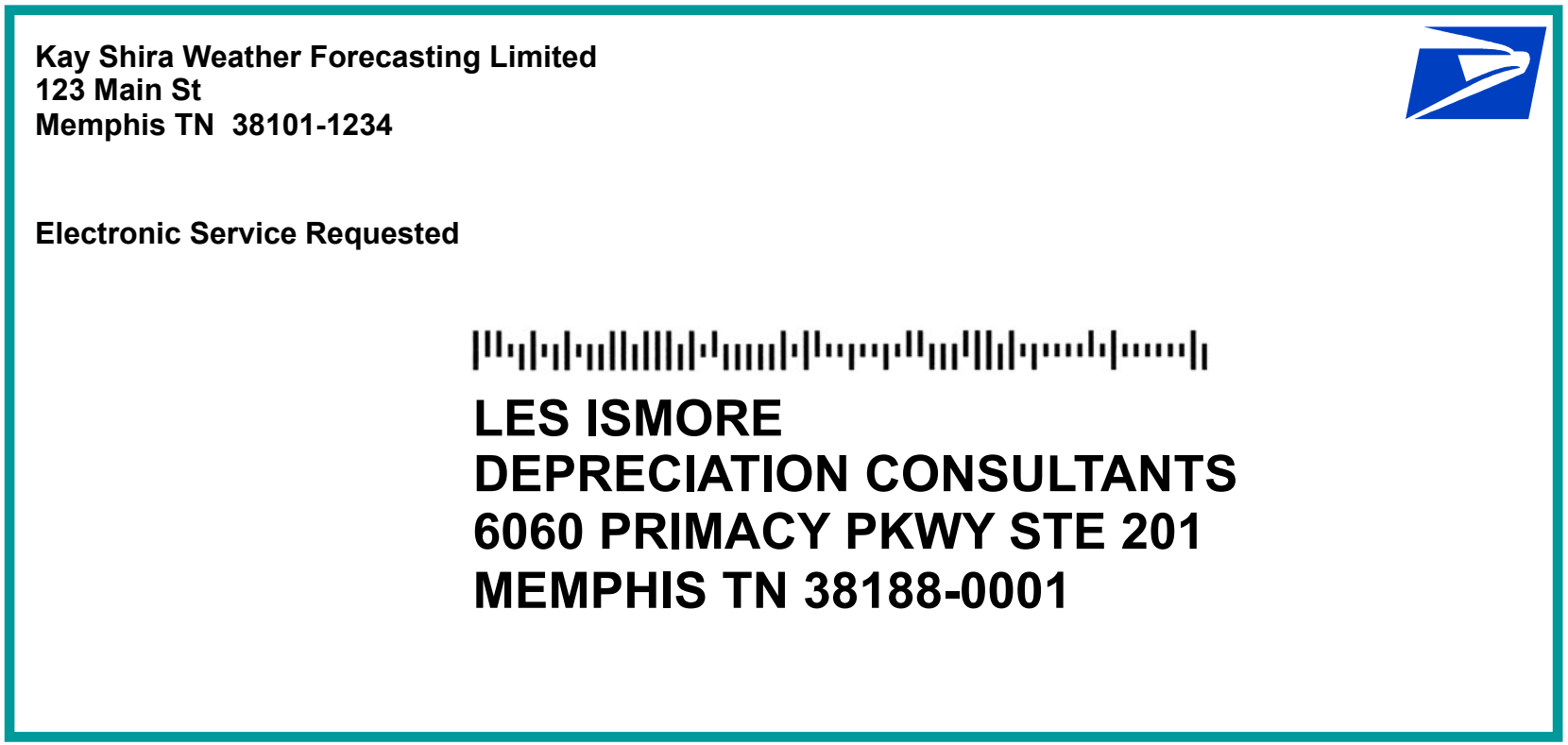


- Participant Code and Keyline always preceded by #
- For window envelopes – Tap Test from top & bottom

OneCode ACS®

- OneCode ACS using the standardized Intelligent Mail™ barcode (IMB)
- Great pricing for First-Class® & Standard Mail® mailers automation compatible letter size mail
- Eliminates need for participant code and keyline
- Provides electronic address correction notifications

Example of An OneCode ACS® Mailpiece



- Must print ancillary service endorsement for Standard Mail® – recommended for First-Class Mail®

FASTforward® MLOCR
What Is It?

- Enables mailers to update COA information directly on mailpieces prior to mailing
- USPS-licensed technology for MLOCR & RVE (Remote Video Encoding) users
  - *FASTforward System* Consists of:
    - Tamper-Proof Microcomputer System With Defined Interface Protocol
    - USPS supplied matching software and encrypted 13-month COA database – updated weekly

FASTforward®: Example of An MLOCR Redirected Mailpiece

Ms N. Formation, Esq.
Dewey Cheatem & Howe PC
123 Main St
Memphis TN 38101-1234

JUDGE A. MENTALL
456 ELM ST STE 201
MEMPHIS TN 38188-0001

COA-AA 1000 SE 17TH ST 38119

- Window must be a minimum of 5/8th inch from bottom to enable printing COA information

Ancillary Service Endorsements

- request a hard-copy notification of the addressee's new address
- tell the Postal Service how to handle UAA mail

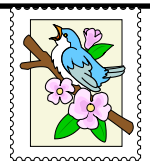
Return Service Requested
Temp-Return Service Requested (First-Class Mail only)
Address Service Requested
Change Service Requested (On First-Class Mail, only available when used in conjunction with ACS)

Ancillary Service Endorsement

APPLETREE POINT
123 SUNSET LN
SOUTH EUCLID OH 44121-4912

3

ADDRESS SERVICE REQUESTED



RETURN SERVICE REQUESTED

1

FORWARDING SERVICE REQUESTED

4

2

CHANGE SERVICE REQUESTED

#BWNCXBB**AUTOCR**C003

WILL BUY
101 MAPLE ST
AVON OH 44001-3419

UNITED STATES POSTAL SERVICE®

Alternate Methods (First-Class Mail® Only)

In Limited Circumstances, An Alternate Method to Meet Move Update Requirement May Be Approved:

- Mailer Demonstrates That Their Internal List Management Maintains Address Quality at 99% or Greater Accuracy For Change-of-Address

- Mailer Demonstrates A Valid Legal Restriction Which Prevents Changing Customer Address Without Approval

MAILPIECE DESIGN FOR AUTOMATION

Visit our websites at:

www.usps.com

http://pe.usps.gov/

http://postalpro.usps.gov/