



Presort Services

Customer Guide Mailpiece Design

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1.0 Automation Compatible Mail

Introduction

Not everybody thinks of it this way, but contrary to our opinions about mail creation the Postal System is an automated process. In order to qualify for discounts on postage a mailpiece must be automation compatible. This means the mailpiece must meet the United States Postal Service (USPS) guidelines for physical characteristics and address quality elements.

This guide provides the basic knowledge needed by those responsible for creating mail or influencing the mailing process. Mail comes in and out from virtually every department in an organization and it is challenging to keep everyone updated on the latest processing techniques and requirements. Mail typically comprises up to 80% of a company's contact with customers and prospects, thus it is vital that the process works right the first time and every time.

What's in it for you?

In addition to productivity gains and cost reductions, a significant benefit derived from standardizing your mailing process is improved service to your bill paying customers. High quality documents, streamlined for automation, can be delivered 1-3 days faster at a much lower cost. This translates into faster customer service, prompt payments, and improved cash flow; all of which provide competitive advantages, higher profits, and fewer lost business opportunities.

More Help!

Additional information is available at your USPS Postal Business Center or visit the USPS Web Site at: <http://www.usps.gov/>.



1.0 Automation Compatible Mail

What happens to the mail?

The United States Postal Service utilizes high speed Multiline Optical Character Reader (MLOCR) machines to process mail, and the entire success of the system depends on getting an Intelligent Mail barcode onto each letter. The Intelligent Mail barcode is a graphical, machine-readable representation of the address, as well as other tracking information.



When a letter has been barcoded, it can travel all the way to the addressee's mailbox before being touched by another human hand, avoiding a lot of manual labor and potential for human error.

Letters that are not barcoded by the sender get a barcode from an MLOCR if the address is clearly printed and placed in a "readable" position on the envelope.

Non-barcoded letters must be processed manually, slowing the delivery time and increasing costs.

MLOCR and the mailpiece

Letters processed on the automation equipment used by both the USPS and Pitney Bowes Presort Services speed past the MLOCR's camera at up to 36,000 pieces per hour or 9 letters per second. During the 1/9 of a second, the MLOCR does the following:

- » Takes a picture of the address
- » Sends the picture of the address to the MLOCR's computer
- » Converts the image of the characters seen on the letter into data
- » Searches the computer directory to validate the city, state and ZIP Code from a list of 120,000,000 addresses
- » Prepares the 31-digit Intelligent Mail barcode with the correct tracking and delivery point information.

1.0 Automation Compatible Mail

Precautions when creating an “automated” mailpiece

Because there is so little time to accomplish several critical tasks each mailpiece and each address must be designed as well as it can be.

- » The lowest lines of the address must contain only the necessary information - upper case characters and numbers
- » The address must be in the MLOCR Read Area (described later in this guide)
- » The print (the lines that make up the characters and numbers) must be uniform in size and thickness and dark enough to show up clearly against the background color of the paper
- » The spacing between characters and words and lines of the address must be uniform
- » Recommended 10 or 12 point font-size. Avoid script, bold and narrow fonts. Some fonts that read very well: Arial, Courier, Helvetica and Tahoma
- » The characters must not overlap or touch each other. There must be a clear “vertical” space between characters, 10 mils. wide
- » There must be no extraneous print or markings to either side of or below the address within the MLOCR Read Area. The “camera” simply takes a picture. It cannot discriminate between a stray mark or a “logo” and a necessary street number or city name

Physical characteristics of an “automation” compatible mailpiece

MLOCR compatible letters include pieces which are rectangular in shape, at least 3 1/2” and not more than 6 1/8” high, at least 5” long but not longer than 11 1/2”, weigh 2 ounces or less (some 3 ounce mail can be accepted - contact your Presort Services representative or the USPS Business Center) and have no printing in the “Barcode Clear Zone” where the MLOCR must spray the Intelligent Mail barcode. Most standard business envelopes, letters, invoices and statements meet these standards.

Letters that are not rectangular tend to “tumble” during high speed processing and become caught in the equipment. Thick pieces and heavier letters are at times damaged as they travel through the machines on their way to a destination pocket.

Unsealed letters and self mailers that are not securely sealed with adhesive tabs can be torn and defaced during high-speed processing. These types of mail are not eligible for automation discounts.



1.0 Automation Compatible Mail

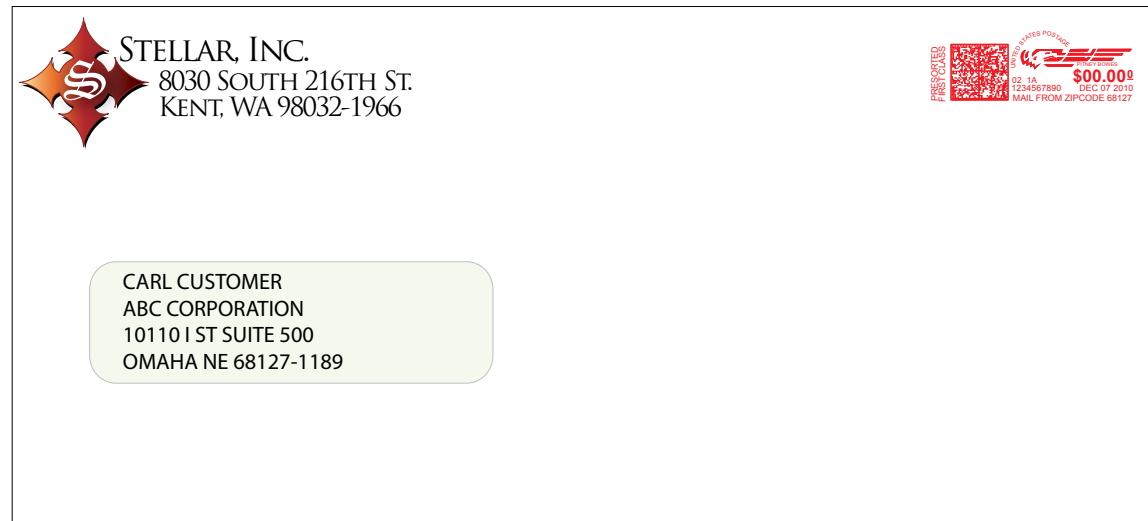
Where should the address be placed on the envelope?

The MLOCR will “look” for the address in the lower 2/3 of the mailpiece. The bottom address line should be at least 5/8 of an inch from the bottom of the envelope. The left and right edge of the envelope should have 1/2 inch of space from both edges. This frames the area called the MLOCR READ AREA which must contain only the address of the recipient to ensure proper reading of the address.

Are there any common problems with addresses to be aware of?

YES! In this guide, we have addressed some of the most common problems with mail creation. These issues are easily solved by educating individuals on the solutions to correct these problems, and perhaps more importantly by educating them on how to avoid them from happening.

The MLOCR reads “BACKWARDS.” You and I write an address from the upper left corner to the right, from the top line to the bottom line. The MLOCR reads backwards, from bottom-to-top and right-to-left. From this you can see that correct positioning, font selection, and print quality are essential to the mailing process.



Resources available when developing a mailpiece?

If you have any questions about mailpiece design, please contact your Pitney Bowes Presort Services Customer Service Manager or the USPS Business Center. Utilizing both sources of information will allow you to develop and test the automation compatibility of your mailpiece.

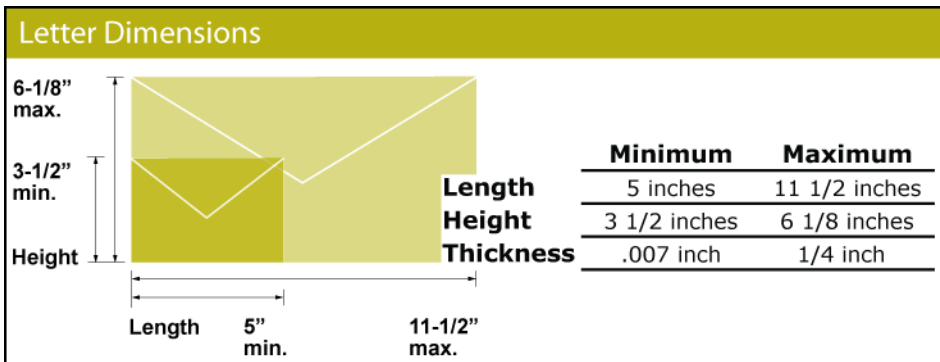
Included in this guide is a reference to the USPS publication entitled “Designing Letter Mail” Publication 25. This publication covers the USPS requirements for Automation Compatible Mail.

2.0 Mailpiece Design

Letters

Automation rate discounts for letter-size mail require a qualifying delivery point barcode. In addition, the mailpiece itself must meet the physical requirements for automated letter sortation. This applies equally to all letter-size mailpieces, regardless of class.

Letter-size mail which is more than 4 1/4 inches high or more than 6 inches long (card size maximums) must be at least 0.007 inch thick.

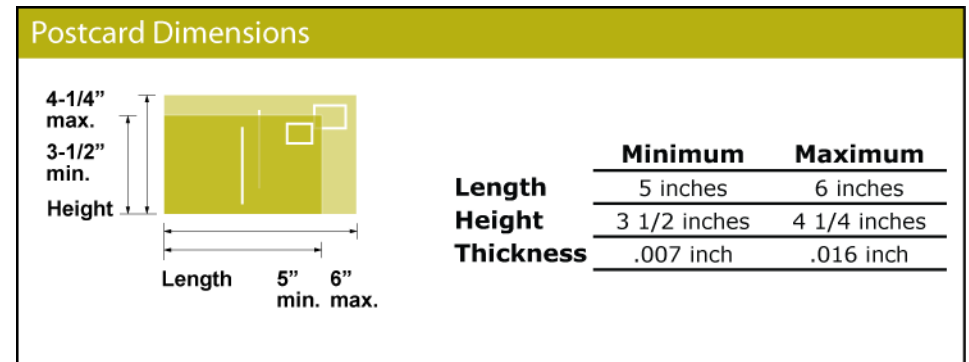


Cards

Qualifying postcards must meet all the basic size and construction requirements for card rates as outlined on page three. Pieces formed from a single piece of cardstock that exceeds the postcard-size maximum dimensions of 4 1/4 inches by 6 inches may qualify for letter-size automation rates.

Pieces exceeding either the height or length maximums for postcards must be at least 0.007 inch thick to continue to qualify for letter-size (not card) automation rates.

Giving us your postcards with a CASS Certified address block barcode already printed on them is a way to prevent issues that can arise with the processing of postcards.



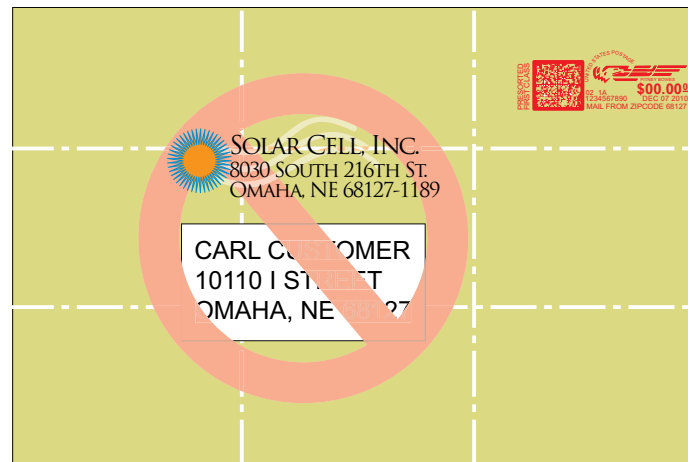
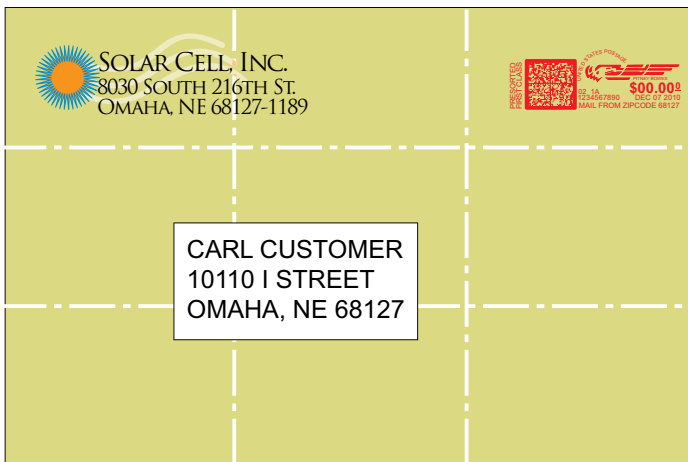
Automation compatible mail should not be prepared using glossy stock for the envelopes or glossy card stock for postcards. If you have any questions about mailpiece design, please contact your Pitney Bowes Presort Services Customer Service Manager. This will help to ensure that your mailpieces are automation compatible for discounts, and avoid any unnecessary USPS surcharges.

2.0 Mailpiece Design

Flats

USPS automation discounts apply to flat-size mailpieces that are barcoded by the mailer. Presort Services processes First-Class flats for automation discounts. Automation rate discounts for flat-size mail allow for either a ZIP+4 Code or a delivery point barcode. In addition, the mailpiece itself must meet the physical requirements for automated flat sortation. This applies equally to all flat-size mailpieces, regardless of class.

- » Delivery address must be more prominent than the return address
- » Recommended 10 or 12 point font-size. Avoid script, bold and narrow fonts
- » Some fonts that read very well: Arial, Courier, Helvetica and Tahoma
- » Address left justified, not centered
- » Delivery address to right and below return address
- » At least 1/8" clear zone around entire delivery address



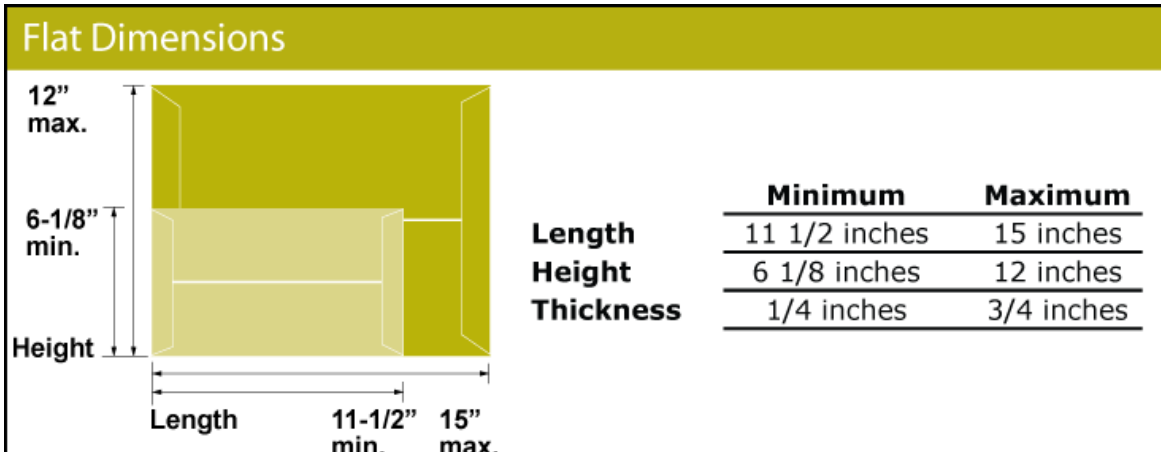
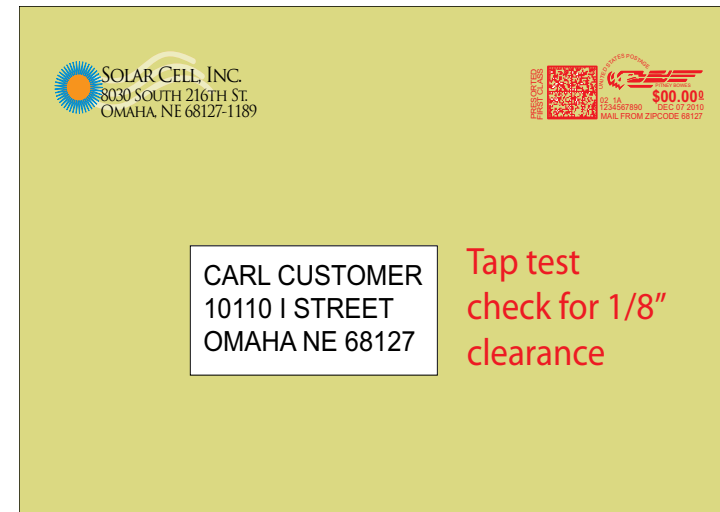
Imagine your flat is divided into 9 equal parts. Place the delivery address in a different section than the return address.

2.0 Mailpiece Design

Flats

First-Class flats must meet the following standards in order to qualify for flat-size postage rates.

- » Weigh no more than 13 oz. and be rectangular in shape
- » Uniform thickness – no more than 1/4 inch variance
- » Flexible (must meet USPS flexibility requirements)
- » Deflection (must meet USPS deflection requirements) Droop Test
- » Clasps, strings, button closures or any protrusions are prohibited
- » Meter strip should be parallel to the address
- » Tyvek envelopes are not permitted
- » Glossy stock envelopes are not recommended



These dimensions are for automation compatible flats. If you are preparing non-automation flats the specifications will be different. Contact your PBPS Customer Service Manager.

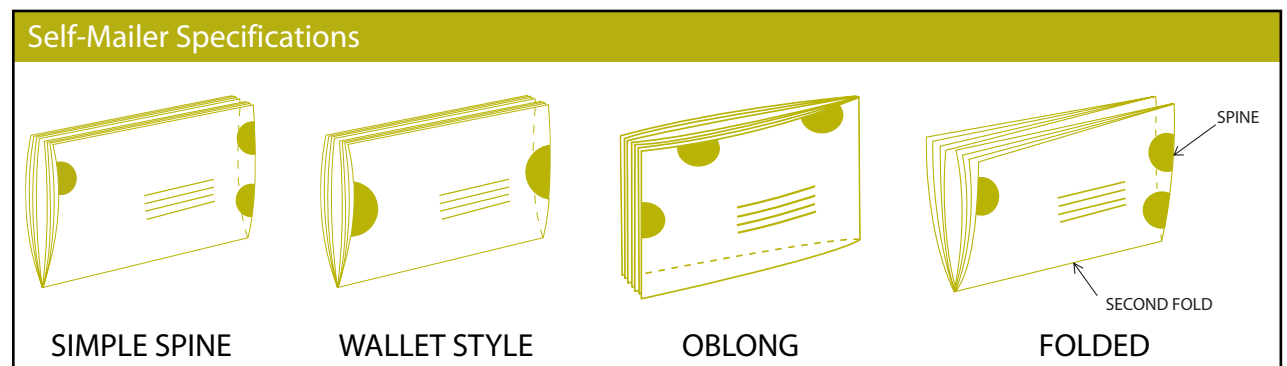
2.0 Mailpiece Design

Self-Mailers

Envelopes and other mailpieces securely sealed on all four edges provide the best assurance for successful automated processing. However, an open or folded mailpiece also qualifies for automation rates when it has been properly designed and tabbed or sealed.

Folded self-mailers and booklets must be tabbed to prevent the open edges from fanning out and jamming during high speed processing. The standards for these types of mailpieces are generally set by the basis weight of the paper stock and the location of the folded or bound edge.

- » Fold on bottom is preferred
- » Tabbing, tape or glue strip recommended for any letter-size mail; required if claiming automation
- » The same addressing requirements for letters also apply to self-mailers
- » Consult your Pitney Bowes Presort Services Customer Service Manager if you have questions or see USPS Commercial Letters (section 201 in the DMM)

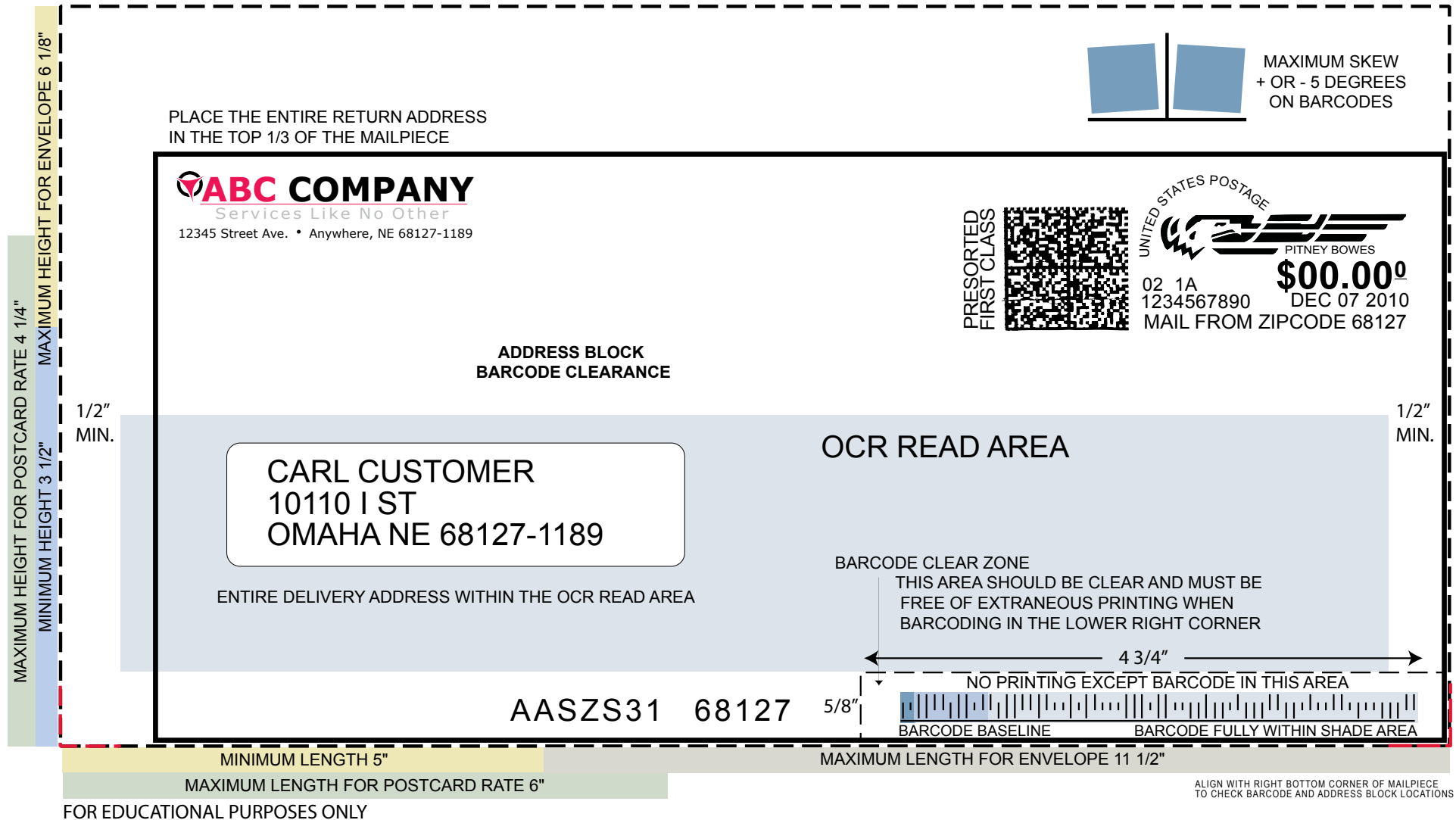


Type	Length	Cover Stock	Sealing	Tab In These Locations
Simple Spine - Spine or final fold on the bottom (longer) edge.	5" to 9" long, Over 9", up to 10.5" long	50-pound or 60-pound	Three 1.5" nonperforated tabs	Two tabs on leading edge; one tab on trailing edge. Position lower leading tab 0.5 inch from the bottom edge. Position upper tabs within 1 inch from the top edge.
Folded - Final fold on the bottom (longer) edge, with the folded spine on the leading or trailing (shorter) edge.	5" to 10.5" long	40-pound	Three 1.5" nonperforated tabs	Two tabs on leading edge; one tab on trailing edge. Position lower leading tab 0.5 inch from the bottom edge. Position upper tabs within 1 inch from the top edge.
Oblong - Spine on the leading (shorter) edge.	5" to 9" long Over 9", up to 10.5" long	60-pound 70-pound	Three 1.5" nonperforated tabs	Two tabs on top edge; one tab on trailing edge. Position top tabs 1 inch from left and right edge. Position trailing tab in the middle.
Simple Spine - Wallet Style -Saddle-stitched spine (two or more staples) on the bottom (longer) edge. 4" height only. Maximum Weight 2.5 ounces.	5.2" to 8" long	60-pound for cover and pages 70-pound cover with 50-pound pages	Two 1.5" or 2" nonperforated tabs	One tab on leading edge and one tab on trailing edge. Booklets up to 2 ounces: 1.5" tabs, 1-1/4" from bottom edge. Over 2 ounces up to 2.5 ounces, 2" tabs, 3/4" from bottom edge, ±1/8" vertical tolerance for tab placement for both tab sizes.

2.0 Mailpiece Design

OCR Read Area

Allow 1/8" clearance left and right and 1/25" above and below between the barcode and any other printing. Entire address block must be within 4" of top and at least 1/2" from right or left side. Entire address block (and barcode) must be at least 5/8" from bottom. For window envelopes, the address must have 1/8" clearance around the address block and not shift out of the window area.



2.0 Mailpiece Design

Address Format/Address Block

All mail must bear a delivery address. Except for simplified addresses, a complete delivery address contains non-address information, attention line, recipient line, delivery address line and city, state and ZIP (ZIP+4) Code from top to bottom.

The Postal Service and the mailing industry have jointly developed standardized formats for addresses. These formats enhance the processing and delivery of mail and reduce Undeliverable-As-Addressed (UAA) mail. This provides for mutual cost savings through improved efficiency.

ADDRESS BLOCK

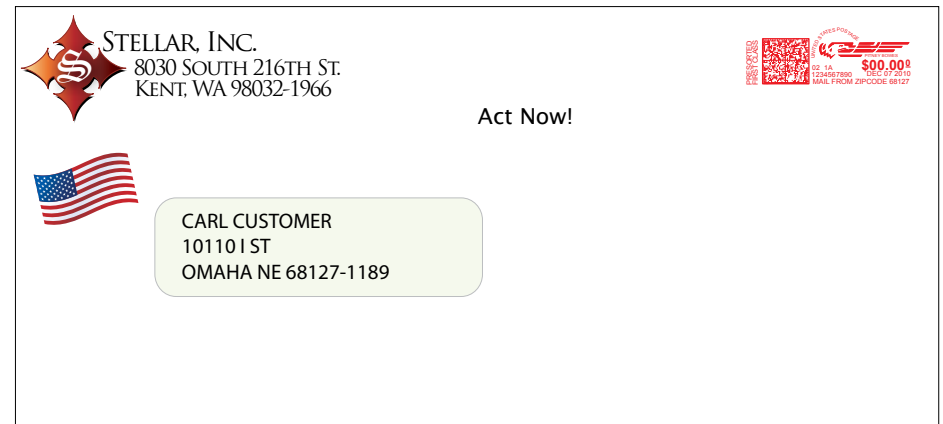
- | | |
|--------------------------|-----------------------|
| 1. NON-ADDRESS DATA | > XX 6548987498-XC |
| 2. INFORMATION/ATTENTION | > CARL CUSTOMER |
| 3. RECIPIENT | > ABC COMPANY |
| 4. DELIVERY ADDRESS | > 10110 I STREET |
| 5. CITY, STATE, ZIP CODE | > OMAHA NE 68127-1189 |

DUAL ADDRESSING

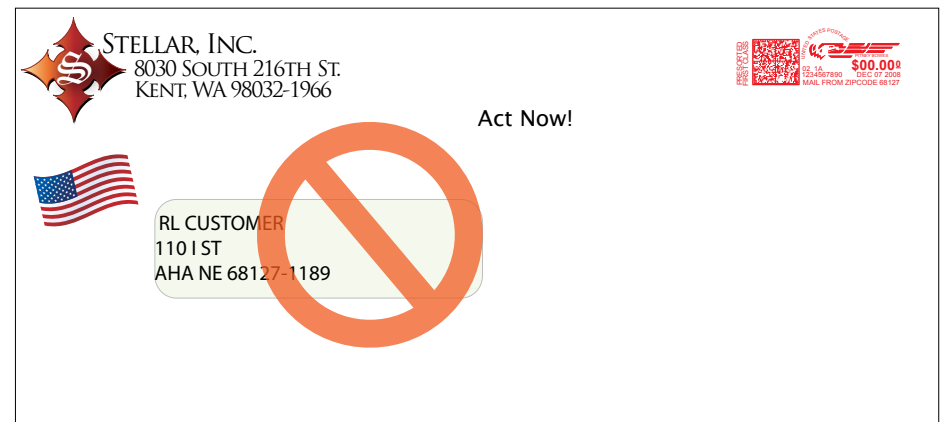
- | | |
|--------------------------|--------------------------------------------|
| 1. NON-ADDRESS DATA | > XX 6548987498-XC |
| 2. INFORMATION/ATTENTION | > CARL CUSTOMER |
| 3. RECIPIENT | > ABC COMPANY |
| 4. DELIVERY ADDRESS | > 10110 I ST |
| 5. DELIVERY ADDRESS | > PO BOX 500 (mail will be delivered here) |
| 6. CITY, STATE, ZIP CODE | > OMAHA, NE 68127-1189 |

OCR Readability

Window envelopes must have 1/8" clearance between the address and any window edge even with maximum insert shift.



Rejection or miscoding to the incorrect address (even the return address) can occur when information slips out of view of the window.

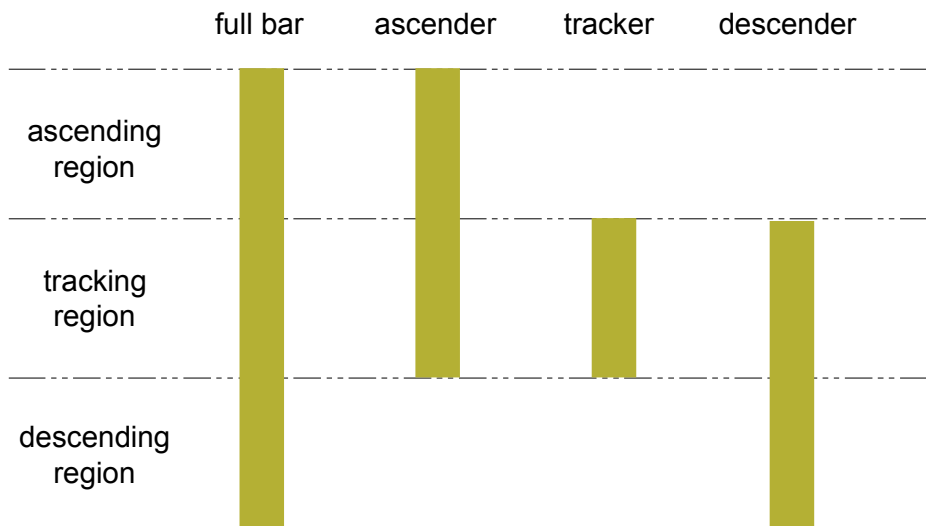


2.0 Mailpiece Design

IMb Example

The Intelligent Mail barcode is what is known as a four-state barcode. The states refer to the four different positions a bar can hold – a full bar, an ascender, a descender, or a tracker.

Additionally, the Intelligent Mail barcode is composed of sixty-five bars which are capable of encoding thirty-one digits of data. The thirty-one digits include the following:



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

Address Block Placement

An address block barcode requires certain clearances relative to any printing and the edges of the window or address label. This allows the barcode sorter to successfully locate the barcode.

Address Block Barcode Placement

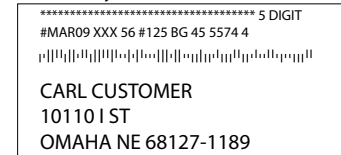
Above Address (Preferred)



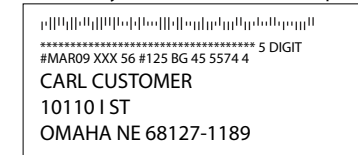
Below Address (Acceptable)



Below Optional Endorsement Line and/or Key Line Information (Preferred)



Above Optional Endorsement Line and/or Key Line Information (Acceptable)

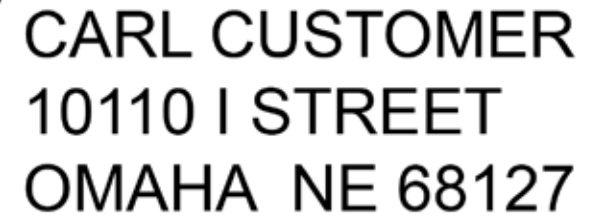


3.0 Addresses

Addressing Accuracy

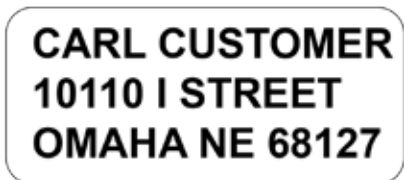
Correct addressing affects efficient delivery of your mail. The ZIP + 4 Code helps direct your mail. Use the correct Acronyms & Abbreviations list for a complete address. You can also use tools provided by the USPS to address further questions.

- » All capital letters
- » Font should not overlap or touch
- » Minimum 10 pt font
- » No abbreviation to city
- » No punctuation
- » Address printed on white background



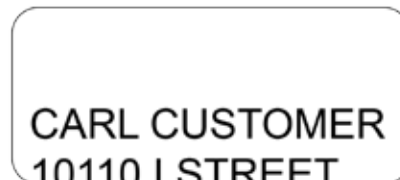
CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

Avoid these type of examples:




CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

bold print



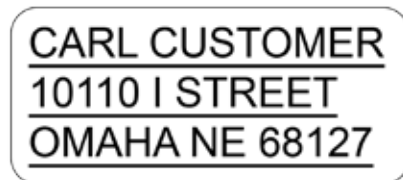
CARL CUSTOMER
10110 I STREET

print not shown



CARL CUSTOMER
10110 I STREET
OMAHA, NE 68127

background color



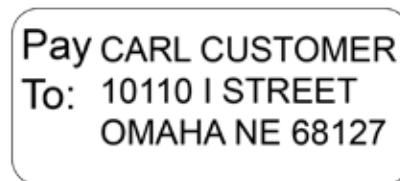
CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

underline print



ARL CUSTOMER
0110 I STREET
MAHA NE 68127

address shift



Pay CARL CUSTOMER
To: 10110 I STREET
OMAHA NE 68127

extraneous print



CARL CUSTOMER
10110 I STREET
OMAHA, NE 68127

background pattern

Skewed

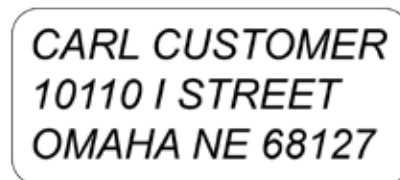


CARL CUSTOMER
10110 I STREET
OMAHA NE 68127



CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

handwritten



CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

italics print



CARL CUSTOMER
10110 I STREET
OMAHA NE 68127

small print

4.0 Resources/USPS Publications

Below are descriptions and online locations of publications, guides and websites that contain valuable information that will help you. The online versions are the most up-to-date.

Quick Service Guides (QSG): The Quick Service Guides provide quick guides to the following:

- » Retail Letters, Flats and Parcels
- » Discount Letters and Cards
- » Discount Flats
- » Discount Parcels
- » Additional Services
- » Basic Standards for All Mailing Services
- » Special Standards
- » Glossary of Postal Terms and Abbreviations

The Quick Service Guide is available on Postal Explorer at <http://pe.usps.com/text/qsg300/q000.htm>

Domestic Mail Manual (DMM): The DMM is the Mailing Standards of the United States Postal Service. It contains all official rates and standards governing domestic mailing services and is mostly used by discount mailers and Postal Service employees. The DMM is available on Postal Explorer at http://pe.usps.com/text/dmm300/dmm300_landing.htm.

Postal Bulletin: Postal Bulletins are the official source of updates to Postal Service policies and procedures. It is published every two weeks. Postal Bulletins are available on [usps.com](http://www.usps.com) at <http://www.usps.com/cpim/ftp/bulletin/pb.htm>.

Mail Pro: Mail Pro is a free bimonthly publication for mailing professionals. It contains information on current Postal Service programs

and services, rates and classification, mailing success stories and industry news. Mail Pro replaced Mailers Companion and Memo to Mailers January 2007. Mail Pro issues are available at <http://www.usps.com/mailpro>.

RIBBS Website: The RIBBS Website contains a wealth of information such as the MQC Specialist List, Quick Links, RIBBS Links, USPS Locators & Lookups, USPS Links, Rate Calculators and Classification Initiatives. RIBBS can be accessed at <http://ribbs.usps.gov/index.html>.

Postal Explorer: Postal Explorer contains a wealth of information such as the DMM, IMM, MQC (under the link Mailpiece Design), Postage Statement Wizard and the list goes on and on. Postal Explorer can be accessed at <http://pe.usps.gov/>.

If a Postal Explorer CD is needed then contact National Customer Support Center at 1-800-238-3150 and submit your order request and payment, then one will be shipped to you.

USPS Publications: Find publications such as the Publication 25, Designing Letter and Reply Mail; Publication 28, Postal Addressing Standards; Publication 32, Glossary of Postal Terms; and many more. USPS Publications can be accessed at <http://www.usps.com/publications/pubs/welcome.htm>.

Glossary of Postal Terms (Publication 32): The purpose of this publication is to define the words and phrases that are unique to, or have special meanings within, the United States Postal Service. Publication 32 can be accessed directly at: <http://www.usps.com/cpim/ftp/pubs/pub32.pdf>.