Designing Letter and Reply Mail—Contents

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Contents

Contents

Appendixes

Contents

Exhibits

Introduction

Purpose

This publication can be used by anyone who wants to reduce mailing costs while benefiting from a faster and more accurate method of mail processing. It can help you design your letter-size mailpieces for improved service and for postage savings. It can be used by printers, graphic artists, forms designers, envelope manufacturers, and computer programmers to verify technical specifications.

Checking the Source

This publication is based on the *Domestic Mail Manual* (DMM), the official source of domestic postal mailing standards. If there is any ambiguity or discrepancy, the DMM is the final authority.

The DMM is available in two formats: paper and electronic. Ordering information is in Appendix E of this book.

The electronic version of the DMM is available in two formats: on the Internet and on an interactive CD-ROM. The Internet address is http://pe.usps.gov, where the DMM is updated monthly. More information about Postal Explorer on a CD-ROM is in Appendix E.

In addition to the DMM, both electronic formats contain the *International Mail Manual* (IMM) and other Postal Service publications; domestic, international, and business rate calculators; zone charts; and postage statements.

1 Automation Benefits

The Value of Automation

Because the costs of processing mail are steadily increasing, the use of automation is the logical choice for improving productivity and reducing expenses. Sorting 1,000 letters through automation saves up to $45 compared with processing the same mail by other, less efficient methods.

The automated system that the Postal Service uses is made up of equipment that processes only "automation-compatible" and "readable" mail, defined as follows:

- "Automation-compatible" means that the mail is of the right size and shape and made of the correct material for transporting at high speeds through our automated processing system.

- "Readable" means that the mail contains a machine-printed address in a standardized format for scanning by multiline optical character readers or contains a correct POSTNET (POSTal Numeric Encoding Technique) barcode, which can be read by barcode readers and sorted on barcode sorters.

If you have a typewriter, computer printer, or other means of machine printing, you can produce letter-size mail for automated processing.

Check with your post office for more information on postage discounts for automation-compatible mail.

Financial Savings

The main reason for seeking your support is lower costs. Automated processing of mail can reduce postal expenses more than any other effort. The more mail we can process by automation methods, the more money we can save—savings we can share with you.

More automation means less frequent and smaller rate increases—something that we all want. If you prepare your mail within these guidelines, the Postal Service will give you the best service at the lowest price.

Postal Processing

Methods

The Postal Service processes mail through two types of operations: manual and automated.

- Manual operations require an employee to read the address on each piece of mail and then sort the mail into "pigeon holes" in a letter case.

- Automated operations require that an employee simply feed mail into and remove mail from a machine that both "reads" and sorts.

If your presorted mail is not compatible with Postal Service automation standards, it has to be processed manually. This is time-consuming, costly, and likely to reduce the worksharing discounts you might otherwise be entitled to on mail entered at a business mail entry unit (BMEU).

The Postal Service handles mailpieces differently according to their size. The size of your mailpiece determines which sorting equipment will be used to process your mail. The type of processing that's needed often determines your potential discounts.

Automated Letter Processing Equipment

The Postal Service uses a variety of automated equipment. The most efficient and accurate mail processing results from using automated, high-speed, computerized mail sorting and processing equipment. The Postal Service uses two basic types of automated equipment to process letter-size mail: multiline optical character readers and barcode sorters.

Multiline Optical Character Reader

A multiline optical character reader (MLOCR) scans the address block on each letter-size mailpiece to determine the ZIP+4 code and the delivery point information. The MLOCR verifies the address information against an internal database.

To locate the address, the MLOCR must be able to scan all the elements clearly. That's why a complete address and "good" print quality are so important.

The MLOCR converts that information into a POSTNET barcode. The MLOCR then prints the barcode in the lower right corner *(barcode clear zone)* of the mailpiece and performs an intitial sortation.

The barcode is then used for further sortation. From that point on, the mailpiece is sorted by high-speed barcode sorters (BCSs) that read and interpret the barcode.

MLOCRs are capable of reading, barcoding, and sorting mail at a rate of 40,000 pieces per hour—about 11 pieces per second. These machines are used not only by the Postal Service but also by large companies and collateral mailing agents like presort bureaus and letter shops.

If you accurately barcode your letter-size mailpieces, they can skip the entire MLOCR process and go straight to a barcode sorter. Mail in this category can receive the maximum postage discount.

Barcode Sorter

A barcode sorter (BCS) "reads" POSTNET barcodes on letter-size pieces and sorts the mail accordingly. This machine doesn't read addresses, so it will missort a piece if the customer has applied an incorrect barcode. The BCS can read and sort 40,000 pieces per hour as well.

With the advent of wide area barcode readers (WABCRs), a BCS can find a barcode almost anywhere on the face of a letter-size mailpiece, including the address block area and the barcode clear zone. This allows mailers to apply barcodes so they can qualify for lower rates and take advantage of faster, more efficient mail processing. But, for other reasons, the barcode must always be printed within 4 inches of the bottom edge of the piece—either as part of the address block or within the barcode clear zone in the lower right corner.

If you'd like, the Postal Service can certify your computer system and printers for POSTNET barcoding. The software used for matching ZIP+4, delivery point, and carrier route codes is also certified. You can get a list of vendors that offer this hardware and software from your local postal business center and on our web site.

When buying any ZIP+4 matching software, make sure that the product bears the Postal Service certification seal. The software must be Coding Accuracy Support System (CASS) certified.

Postage Discounts

If you plan to benefit from automation discounts for letter-size mail, use this publication and Notice 67, *Automation Template,* to help you design letter-size pieces that meet the related requirements in the DMM, including all the mailing standards for automation-compatible rate discounts.

The Postal Service offers a variety of postage discounts for correctly prepared automation-compatible mailings. You can qualify for automation rates for delivery point barcoded mailpieces prepared and submitted according to postal standards. Your local post office can help you or refer you to another source for more information.

Barcoding Specifications

Barcoding your mail affects mailpiece design. Because there are no OCR readability standards, you have more latitude in selecting colors, type styles, and the location of the address if you barcode your mail.

When an automation rate mailing—barcoded according to postal standards—is processed directly on BCSs, the mailing does not need to meet the standards for MLOCR readability.

If you are not able to barcode your mailpieces, they should meet all MLOCR readability standards. Meeting these standards will enable a mailing agent (such as a presort bureau or letter shop) to barcode your mail using an MLOCR and to ensure that the read rates will be high. For more on these standards, see Chapter 3.

Mailings of letter-size pieces that receive an automation discount require the customer to barcode 100 percent of the pieces with a delivery point barcode. Nonbarcoded pieces would be part of a nonautomation rate mailing or enter a separate mailstream the way a nonautomated presorted mailing would. For more information, see DMM M130 and Quick Service Guide 130 or 131.

Assistance

Postal Service mailpiece design analysts (MDAs) and others in business mail acceptance can help you meet the guidelines in this publication and determine the automation compatibility and readability of your mailpieces. Also, many companies employ specialists to provide this service to their companies.

MDAs also take a more proactive approach: they will help you create the mailpiece from the beginning of the design process. These analysts have a thorough understanding of all postal automated processing equipment and mailpiece design standards.

Account representatives can also help you with these guidelines and answer your questions about postage discounts for automation-compatible mail.

For more information or help, contact your post office or go to http://pe.usps.gov on the Internet.

Tools

Purpose

The templates and gauges described in the following sections are used to measure mailpieces for determining automation compatibility and readability. You can get these tools from your mailpiece design analyst, account representative, postal business center, post office, or on the web at www.usps.com.

Notice 3-A, *Letter-Size Mail Dimensional Standards Template*

This template (see Exhibit 1-1) is used to determine whether a mailpiece meets the size, shape, aspect ratio, and thickness requirements for automated processing. (Pieces that do not meet the standards in Chapter 2 of this publication are not suitable for automated processing.)

Exhibit 1-1
***Notice 3-A,** Letter-Size Mail Dimensional Standards Template*
(not actual size)

Notice 67, *Automation Template*

This template (see Exhibit 1-2) is used to obtain more information on automation readability parameters. This clear plastic template simplifies the task of determining whether your mail is automation-compatible, MLOCR-readable, and printed with the correct facing identification mark (FIM) pattern. It's used to determine other standards for reply mail pieces as well (see Chapter 5).

Exhibit 1-2
Notice 67, Automation Template
(not actual size)

POSTNET Code Eyepiece With Reticle

This eyepiece (see Exhibit 1-3) is used to determine whether a barcode meets POSTNET specifications. The eyepiece is placed on a bar or barcode so it can be examined. The cost of the eyepiece varies according to any added features. Order it from:

GAGE-LINE TECHNOLOGY INC
121 LAGRANGE AVE
ROCHESTER NY 14613-1577
Phone (716) 458-5310, Fax (716) 458-0524.

Exhibit 1-3
POSTNET Code Eyepiece With Reticle
(not actual size)
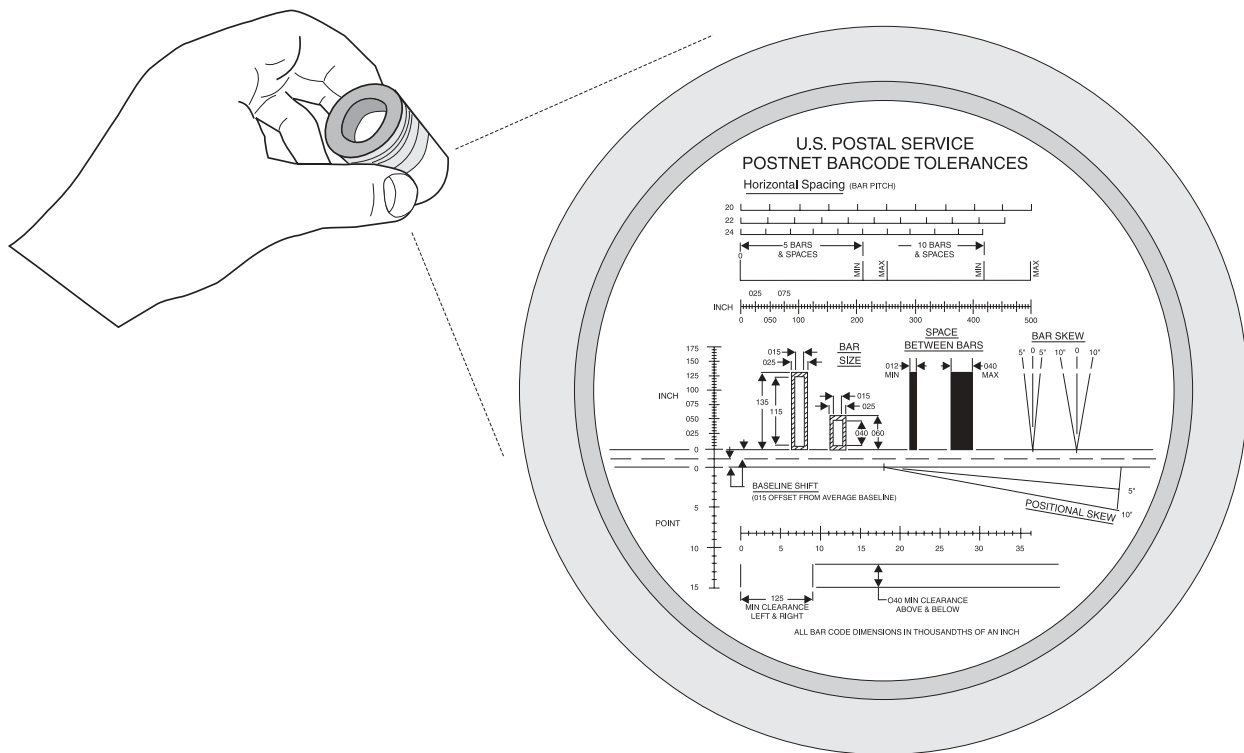
Barcoding Software and Equipment

Equipment and software that print the POSTNET barcode as part of the delivery address are available from many vendors. The prices vary according to the features included.

The systems, printers, and software offered by these vendors are certified by the Postal Service as having the ability to produce accurate POSTNET barcodes that satisfy the specifications in Chapter 4. You can obtain a list of vendors offering hardware and software for POSTNET barcoding from postal account representatives, postal business centers, or the Postal Service web site.

When purchasing any barcoding software or equipment, make sure that the product is certified by the Postal Service.

2 Automation Design Standards

Overview

Making your mailpieces automation-compatible is important. Automated equipment can process mail more efficiently, allowing the Postal Service to maintain lower rates for those pieces.

Your automation-compatible mailpiece should:

- Meet the size and weight standards in this chapter.

- Be made of good quality white or light-colored paper.

- Contain no sharp or bulky items.

- Be sealed securely.

- Be readable by automation equipment.

Mailpiece Dimensions

Minimum and Maximum Sizes

When letter-size mail is processed on automated equipment, it moves at high speeds through belts and rollers past an optical scanner and to the appropriate bin or stacker after it's sorted.

Although MLOCRs and BCSs can sort a variety of letter sizes, mailpieces that qualify for letter rates must be rectangular and within the minimum and maximum dimensions shown in Exhibit 2-1.

Exhibit 2-1
Letter Mail Dimensions

Dimension	Minimum	Maximum
Height	3-1/2"	6-1/8"
Length*	5"	11-1/2"
Thickness	0.007"	1/4"

* The length is the dimension parallel to the delivery address.

Letter-size mail that is less than 10-1/2 inches long processes better than longer-size pieces. MLOCRs read address information that is located up to 1/2 inch from the right and left edges of the piece.

The following standards also apply to letter-size mail:

- Letter-size mail length is the dimension that parallels the delivery address. The top and bottom of the mailpiece also parallel the delivery address.

- Letter-size mail must be at least 0.009 inch thick if it is more than 4-1/4 inches high or more than 6 inches long.

- For best results, letter-size mail more than 10-1/2 inches long should have the address within 9-3/4 inches of the right edge of the mailpiece, with at least a 1/2-inch clear vertical space (margin) on each side (see Exhibit 3-1).

- Cards that measure more than 4-1/4 inches high, 6 inches long, or 0.016 inch thick are charged postage at the First-Class Mail letter rates.

Nonmailable Pieces

All pieces (letters and cards) not meeting the minimum size standards in Exhibit 2-1 are nonmailable.

Nonmachinable Characteristics

Nonmachinable letter-size pieces are not automation-compatible, so they are not eligible for automation rates.

First-Class Mail pieces that weigh 1 ounce or less are nonmachinable and subject to a nonmachinable surcharge if any one of the following is true:

- Height is greater than 6-1/8 inches.

- Length is greater than 11-1/2 inches.

- Thickness is greater than 1/4 inch.

First-Class letter-size mailpieces weighing 1 ounce or less and Standard Mail letter-size pieces weighing 3.3 ounces or less are considered nonmachinable and subject to a nonmachinable surcharge if they have one or more of the following characteristics:

- An aspect ratio (length divided by height) of less than 1.3 or more than 2.5.

- Are polybagged, polywrapped, or enclosed in any plastic material.

- Have clasps, strings, buttons, or similar closure devices.

- Contain items such as pens, pencils, or loose keys or coins that cause the thickness of the mailpiece to be uneven.

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

- For pieces more than either 4-1/4 inches high or 6 inches long, when the thickness is less than 0.009 inch.

- A delivery address that is parallel to the shorter dimension of the mailpiece.

- Self-mailers with folded edges perpendicular to the address, unless the piece is folded and secured according to DMM C810.8.2.

- Booklet-type mailpieces with the bound edge (spine) along the shorter dimension of the piece or at the top, regardless of the use of tabs, seals, or other fasteners.

For letter-size mailpieces, the length is the dimension parallel to the address.

Exhibit 2-2
Aspect Ratio
(not drawn to scale)

Standard Aspect Ratio: 1.5   Nonstandard Aspect Ratio: 1.25
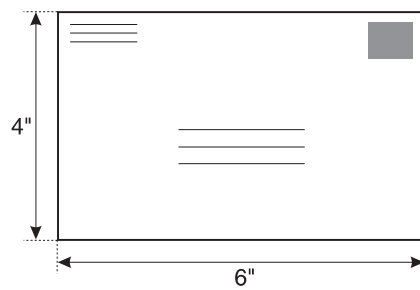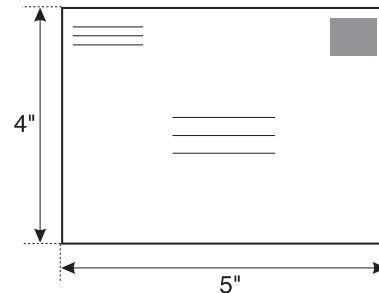
Mailpiece Materials and Construction

Paper Weight

The following recommendations for paper and card stock refer to the minimum basis weight of the materials. Basis weight is defined as the weight (in pounds) of a ream (500 sheets) cut to a standard size for that grade.

For example, envelopes for automation-rate mailings should be constructed of paper weighing at least 16 pounds (minimum basis weight). The specific grade of 16-pound paper recommended for envelopes is defined as 500 sheets measuring 17 inches by 22 inches (17 inches by 22 inches by 500 sheets).

Recycled paper and card stock are compatible with postal automation if the materials satisfy the recommendations and the guidelines in this book.

Envelopes

Envelopes (the preferred container) and other letter-size containers sealed on all four edges must be made of paper with a minimum basis weight of 16 pounds (measured weight of 500 17-by-22-inch sheets). For business reply mail envelopes, the minimum basis weight is 20 pounds (see Chapter 6 and DMM section S922).

Folded Self-Mailers

The required minimum basis weight of paper for folded self-mailers varies with the construction of the mailpieces as follows:

- For self-mailers formed from a single sheet folded at the bottom with the open, top edge sealed with one tab or glue spot, the minimum basis weight is 28 pounds (weight of 500 17-by-22-inch sheets) or 70 pounds (weight of 500 25-by-38-inch sheets).

- For self-mailers formed from two or more sheets that are sealed with one tab or glue spot, the minimum basis weight is 24 pounds (weight of 500 17-by-22-inch sheets) or 60 pounds (500 25-by-38-inch sheets).

- For any self-mailer that is sealed with two tabs or two glue spots, the open edge can be at the top or bottom. The minimum basis weight is 20 pounds (weight of 500 17-by-22-inch sheets).

Exhibit 2-3, taken from Quick Service Guide 811, shows the proper placement of tabs or glue spots on folded self-mailers. Tabs, wafer seals, tape, or glue may be used to seal folded self-mailers. Tabs and other seals placed at the top of folded self-mailers should be positioned so that they do not cover the return address, postage, or rate markings.

Tabs and other seals placed in the barcode clear zone on nonbarcoded pieces (see Chapter 3) should be made of uncoated white or light-colored paper that satisfies the background reflectance specifications in Chapter 3. These specifications ensure successful barcode printing and reading by an MLOCR. For optimal processing, folded self-mailers should be constructed with the fold at the bottom and the tab(s) or glue spot(s) at the top.

Booklets

The required minimum basis weight of paper for covers on booklet-type mailings is 20 pounds (weight of 500 17-by-22-inch sheets). See DMM C810. Booklets must be constructed to meet these requirements:

- The bound edge or spine must be at the bottom edge of each booklet, parallel to the lines of the delivery address.

- The open edge of each booklet must be at the top and secured with at least two tabs. One tab must be placed within 1 inch of the left edge, and the other tab must be placed within 1 inch of the right edge. Instead of tabs, wafer seals or tape may be used. Tabs or closures may be affixed to the top edge or to the right and left edges within 1 inch of the top edge.

Exhibit 2-3 shows the proper placement of tabs on booklets.

Exhibit 2-3
Folded Self-Mailers
(not drawn to scale)

may be more than 1"
← 1" max. →

may be more than 1" but
must not interfere with
FIM or postage
← 1" max. →

Tab

Tab

Postage

Specifications for Automation-Compatible Letter-Size Mailpieces

Double Postcard
Tabs   1 (middle)
Folded Edge Top or Bottom
Sheets   Single
Basis Weight 75 lb.

Folded Self-Mailer
Tabs   2 (start ≤ 1 inch
             from edges)
Folded Edge Top or Bottom
Sheets   Single
Basis Weight 20 lb.

Folded Self-Mailer
Tabs   1 (middle)
Folded Edge Bottom
Sheets   Multiple
Basis Weight 24 lb.

Folded Self-Mailer
Tabs   1 (middle)
Folded Edge Bottom
Sheets   Single
Basis Weight 28 lb.

Folded Self-Mailer¹
Tabs   1 (middle)
Folded Edge Right
Sheets   Single
Basis Weight 75 lb.

1. Pieces 7 inches or longer must be sealed on the top and bottom; the middle tab is optional (C810.8).

An 8-1/2 x 11 inch sheet of 20, 24, or 28 pound paper folded once to 8-1/2 x 5-1/2 inches does not meet the minimum thickness of 0.009 inch for an automation-compatible letter.

Folded Self-Mailer
(Invitation Fold)
Tab   Address Label
Folds   Top and Bottom
Sheets   Multiple
Basis Weight 20 lb.

Folded Self-Mailer
(Continuous Glue Strip)
Open Edge   Top
Folded Edge Bottom
Sheets   Single
Basis Weight 20 lb.

Booklet
Tabs   2 (start ≤ 1 inch
             from edges)
Spine   Bottom
Sheets   Multiple with Cover
Basis Weight 20 lb. (Cover)

Folded Booklet
Tabs   2 (start ≤1 inch
             from edges)
Spine   Top
Folded Edge Bottom
Sheets   Multiple with Cover
Basis Weight 20 lb. (Cover)

Spine

Folded Booklet
Tabs   2 (start ≤ 1 inch
             from top edge)
Spine   Top
Folded Edge Bottom
Sheets   Multiple with Cover
Basis Weight 20 lb. (Cover)

Spine

Booklet
Tabs   2 (start ≤ 1 inch from
             top and bottom edges)
Spine   Right (open edge left)
Sheets   Multiple with Cover
Basis Weight 24 lb. (Cover)

Designing Letter and Reply Mail   **15**

Cards

Thickness, stiffness, and tear strength are the most important compatibility characteristics for cards. The minimum thickness is 0.007 inch. The minimum required basis weight for card stock is 75 pounds, with none less than 71.25 pounds (measured weight of 500 25-by-38-inch sheets).

The grain of cards should be oriented parallel to the long dimension of the card. Long-grain cards are less likely to jam postal automated equipment than are cards with the grain parallel to the short dimension of the card.

Cards at automation rates must be 0.009 inch thick if more than 4-1/4 inches high or 6 inches long, or both.

When preparing postcards with perforations, it is recommended that the perf-to-bridge ratio be 1:1. A typical perforation is from 0.1 inch to 0.2 inch. Vertical perforations in the center area of the card are not recommended.

Cards Claimed at First-Class Mail Card Rates

In order to be eligible for the First-Class Mail card rates, cards must be of uniform thickness and made of unfolded and uncreased paper or card stock of approximately the quality and weight of a Postal Service stamped card.

Cards (that is, each stamped card or postcard or each half of a double stamped card or postcard) claimed at a card rate must be:

- Rectangular.
- No less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick.
- No more than 4-1/4 inches high, 6 inches long, and 0.016 inch thick.
- Cards prepared with a message area on the address side must meet specifications in DMM C100.2.6.

Cards exceeding the maximum dimensions for the card rate can be sent at First-Class Mail or Standard Mail letter rates.

Double Postcards

Reply or double postcards must be secured with at least one tab, wafer seal, tape strip, or glue spot placed at the center of the open edge. The open edge may be at the top or bottom of the mailpiece.

For more information on formats of the reply portion, see Chapter 5.

Mailpiece Flexibility

In addition to size, shape, and material used to create your letter mailpieces, flexibility and rigidity are also important. The contents of your mail must be reasonably flexible to ensure proper transport through our automated system.

Our processing equipment moves letter mail at a speed of up to 40,000 pieces an hour through a series of belts, rollers, and conveyor wheels. Each mailpiece must be able to maneuver successfully through this equipment.

At the same time, if your mail is too flimsy, it might catch in the metal joints of the processing equipment. Extremely flimsy and thin mailpieces also tend to stick together or adhere to other pieces easily, causing missorts and possible misdelivery of the mail.

Because pens, pencils, keys, large coins, and other rigid items can damage mail and mail processing equipment, they should never be included in letter mail, and they are prohibited in letter-size mail submitted at an automation rate.

Items such as credit cards and small coins firmly affixed to the contents of a mailpiece are usually acceptable if the mailpiece and its contents can bend easily around an 11-inch-diameter drum.

Magnets and other magnetized materials should be tested and approved for automation-based discounts by the Postal Service.

Refer any question about the dimensions, materials, construction, or contents of your mailpiece to your mailpiece design analyst, account representative, or postal business center before you produce the mailing.

Incompatible Materials and Sealing Methods

Coverings

Certain materials are incompatible with postal automation because they cannot be transported at high speeds through mail processing equipment or they do not allow quality printing of a barcode on the mailpiece for optimal scanning. These materials include polywrap, shrinkwrap, spun-bonded olefin, and other plastic-like coverings. Certain types of coated papers should also be avoided if the coating is so glossy that it can prevent a postal-applied barcode from drying within 1 second. Consult a mailpiece design analyst about nonpaper coverings before you produce your mailpieces.

Dark Fibers and Patterns

Paper containing dark fibers or background patterns is not recommended because it can cause interference during MLOCR and BCS processing. The dark patterns can be mistaken for part of the address or barcode information.

If you use such paper, make sure that the contrast ratio between the fibers (or pattern) and the background does not exceed 15 percent in the red and the green portions of the optical spectrum (see Chapter 3).

Halftone Screens

If the material on which the delivery address is to appear is printed in a halftone screen, the halftone must contain at least 200 lines per inch, or it must be printed with at least a 20 percent screen (see DMM C830).

Paper Types

Envelope paper and paper material on other letter-size mailpieces—such as folded self-mailers—must have sufficient opacity (enough density) to prevent any printing on the inside of the mailpieces from showing through in the MLOCR read area or in the barcode clear zone.

Avoid using textured paper—paper with other than a smooth surface—if the texture adversely affects print quality (that is, causes broken characters or smudged spaces). Because fluorescent paper can confuse the postage detector on postal facer-canceler machines, it's not suitable paper for automation mailings.

Closures

Because closures can jam equipment and damage mail during processing, don't use clasps, staples, string, buttons, or similar protrusions for closing letter-size automation pieces. And make sure that the pieces' edges are not notched, scalloped, or curved.

Window Envelopes and Inserts

Address/Window Clearance

To ensure successful automated processing, design your window envelopes and their inserts so that the entire address and postal barcode (when included) appear in the window area during the full movement of the insert.

For MLOCR processing, at least 1/8 inch of clearance (1/4 inch of clearance is preferred) must be maintained between the address and the edges of the window when the insert is moved to its full limits inside the envelope (see Exhibits 2-4 and 2-5).

MLOCRs need this clear space to distinguish the address from the edge of the window or shadows cast near the address by the edge of the window. Nonaddress information must not show in the window clearance area.

Exhibit 2-4
Address/Window Clearance
(Not drawn to scale)

MS TERRY SMITH
4653 GEORGIA AVE NW
WASHINGTON DC 20011-7128
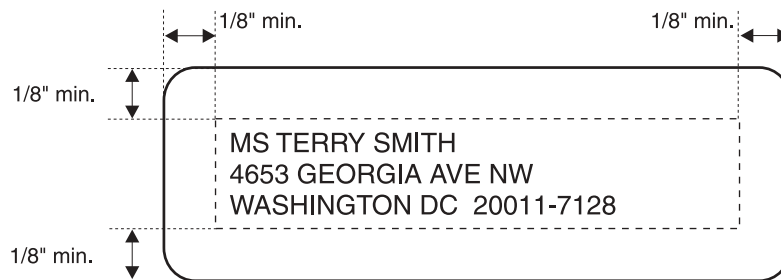
Exhibit 2-5
Excessive Address Insert Shift
(Not drawn to scale)

S TERRY SMITH
53 GEORGIA AVE NW
ASHINGTON DC 20011-7128
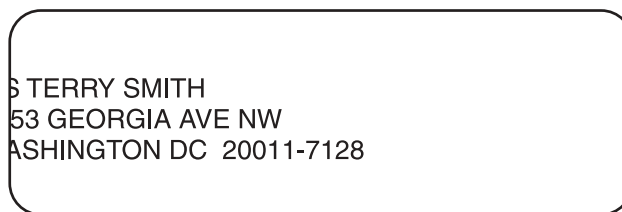
Vertical Address Insert Shift Test

To test the vertical insert shift of the address within a window, do the following:

- Check that a clear space of at least 1/8 inch is maintained between the top of the recipient line in the address and the top edge of the window without tapping the mailpiece (see Exhibit 2-4).

- Tap the mailpiece on a flat horizontal surface on its bottom edge to jog the insert as far down into the envelope as it can go.

- Check that a clear space of at least 1/8 inch is still maintained between the bottom of the post office, state, and ZIP Code line of the address and the bottom edge of the window.

Horizontal Address Insert Shift Test

To test the horizontal insert shift of the address and window, do the following:

■ Tap the mailpiece separately on its left and right edges to jog the insert as far to the left and right as it can go (see Exhibit 2-5).

■ As each side is tapped, check that a clear space of at least 1/8 inch is still maintained between the left and right edges of the address and the left and right window edges.

Barcode/Window Clearance

As with addresses, POSTNET barcodes printed on inserts—including POSTNET barcodes printed as the top or bottom line of the delivery address block—must maintain the following minimum clearances (see Exhibits 2-4 and 2-6):

■ At least 1/8 inch from the left and right edges of the barcode and the edges of the window when the insert is moved in those directions.

■ At least 1/25 inch from the top and bottom edges of the window opening when the insert is moved in those directions. This 1/25-inch minimum clearance is also needed between the top and bottom of the barcode and any other printing.

Exhibit 2-6
Barcode/Window Clearance
(not drawn to scale)
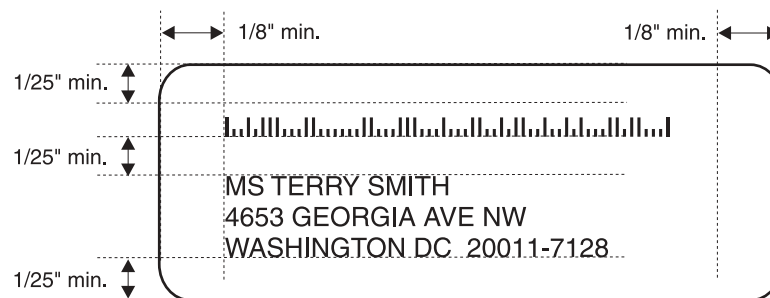
Refer to Exhibit 4-5 for additional address block barcode placement options.

Vertical Barcode Insert Shift Test

To test the vertical insert shift of the barcode and window, do the following:

- If the barcode is the top line of the address block, check that a clear space of at least 1/25 inch is maintained between the top of the barcode and the top edge of the window without tapping the mailpiece (see Exhibit 2-6).

- Tap the mailpiece on a flat horizontal surface on its bottom edge to jog the insert as far down into the envelope as it can go. Check that a clear space of at least 1/25 inch is still maintained between the last line of the address and the bottom edge of window.

- If the barcode is the bottom line of the address block, check that a clear space of at least 1/25 inch is still maintained between the bottom of the barcode and the bottom edge of the window after tapping.

Horizontal Barcode Insert Shift Test

To test the horizontal insert shift of the barcode and window, do the following:

- Tap the mailpiece separately on its left and right edges to jog the insert as far to the left and right as it can go.

- As each side is tapped, check that a clear space of at least ⅛ inch is still maintained between the left and right edges of the barcode and left and right window edges (see Exhibit 2-7).

Exhibit 2-7
Excessive Barcode Insert Shift
(not drawn to scale)
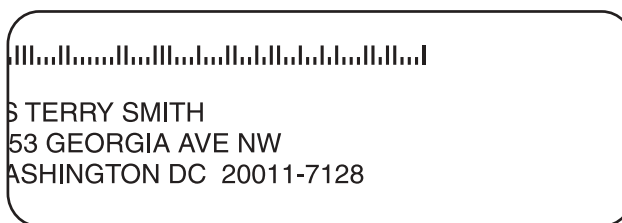
Insert Material

Like envelope paper, insert material must have sufficient opacity to prevent any printing on the inside of the mailpiece from showing through in the MLOCR read area or in the barcode clear zone (see Chapter 3).

Window Coverings

Open or covered windows may be used for addresses and address block barcodes. Windows must always be covered in automation-rate mailings of pieces that weigh more than 3 ounces.

Material for covered windows must be clear or transparent (low-gloss polyclear materials are best) and securely attached on all edges. Cellophane, glassine, and polystyrene are acceptable materials.

All window coverings must be stretched tight and be free of wrinkles, streaks, fogging, colors, and other conditions that can obscure the address or barcode during processing. All address and barcode information, as read through the window, must satisfy the following minimum reflectance and contrast guidelines:

- A print contrast ratio (PCR) equal to or more than 40 percent in the red and green portions of the optical spectrum is necessary for an MLOCR to recognize address information (see Chapter 3).

- A print reflectance difference (PRD) equal to or more than 30 percent in the red and the green portions of the optical spectrum is necessary for a BCS to recognize POSTNET barcodes (see Chapter 4).

Because glassine is somewhat opaque (less transparent) compared with other window-covering materials, addresses read through glassine must produce a slightly higher PCR of 45 percent. The minimum PRD for barcodes read through glassine is 30 percent—the same minimum required for other window-covering material.

Window Clear Space

Address windows should be no lower than ½ inch from the bottom edge of the envelope and may extend ⅛ inch into the barcode clear zone (see Exhibit 2-8).

Exhibit 2-8
Window Clear Space
(not drawn to scale)

Barcode Clear Zone

1/8" max.

1/2" min.

4-3/4"
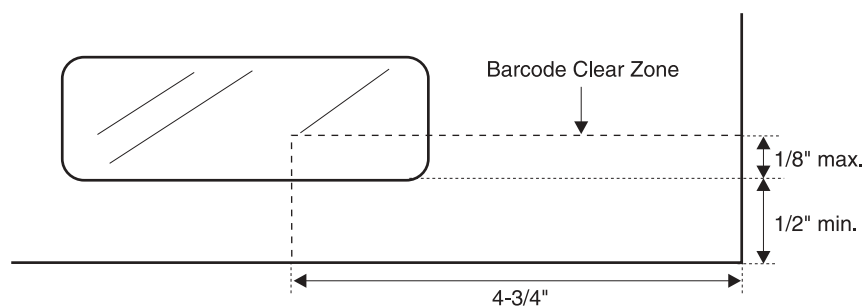
FASTforward^{SM}

In mailings of First-Class Mail, any envelope whose window intrudes into the barcode clear zone is not eligible for MLOCR *FASTforward* processing to meet the move update standard. Check with your local mailpiece design analyst or business mail entry unit for more guidelines.

Address Labels and Stickers

General Standard

Address labels and certain types of stickers placed on the outside of letter mail pieces must be applied using methods and materials that keep the labels or stickers from being damaged or removed during high-speed processing.

Address labels should not contain extraneous printing or designs that interfere with the ability of postal barcode scanners to read the barcode and address information.

Address labels must be placed in the BCS or MLOCR read areas, as appropriate. For information on these areas, see Chapter 3.

Stickers must not be placed in the MLOCR read area.

Permanent Labels

Permanent labels and stickers (not designed to be removed and reused) should be applied with a permanent adhesive or glue. Dextrin-based (recyclable) adhesives are recommended.

Pressure-sensitive peel-off labels and stickers intended to be permanent on letter mail must have a minimum peel-adhesion value of 8 ounces per inch. (This value is determined by the force required to remove, at a 90-degree angle, the label or sticker from a stainless steel surface.)

Manufacturers and suppliers of pressure-sensitive labels and stickers can provide you with information about the peel-adhesion values of their products.

Removable Labels

Labels and stickers to be removed from a backing or liner on letter mail and reused (such as "sandwich labels") must meet the following guidelines:

- When applied to a stainless steel surface, the adhesive on the backing or liner, which is permanently attached to the mailpiece, must have a minimum peel-adhesion value of 8 ounces per inch.

- When applied to the face of the backing or liner, the adhesive on the removable label must have a minimum peel-adhesion value of 2 ounces per inch.

- When reapplied to a stainless steel surface, the adhesive on the removable label must have a minimum peel-adhesion value of 8 ounces per inch.

Barcode Clearance

The following minimum clearances for the POSTNET barcode, when applied to address labels, are the same as the clearances required for barcoded inserts in window envelopes (see Exhibit 2-9):

- At least ⅛ inch between the left and right of the barcode and the left and right edges of the label or other printing.

- At least ¹⁄₂₅ inch between the top and bottom of the barcode and the top and bottom edges of the label or other printing.

Exhibit 2-9
Address Label
(not drawn to scale)
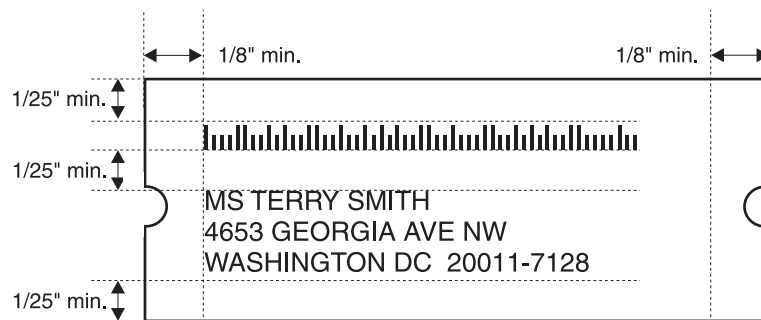
Testing

A mailer who wants to have mailpieces tested for characteristics like flexibility, glossy or coated paper, and nonpaper material must submit at least 50 sample pieces and a written request. The mailer should give them to the postmaster or business mail entry manager at the post office at which the pieces are to be mailed at least 6 weeks before the mailing date.

The Postal Service looks at all the aspects of processing letters on the automated equipment. This system approach includes the operator's ability to efficiently remove the mail from the customer's trays, process it through the equipment, and efficiently sweep it from the output stackers.

The request must describe the mailpiece's contents and construction, the number of pieces being produced, and the level of presort. If necessary, the business mail entry manager will forward the test to USPS Engineering. The manager of business mail entry or Engineering will advise the mailer by letter of its findings.

If the mailpiece is approved, the approval letter will include a unique number that identifies the piece tested and serves as evidence that the piece meets the relevant standards. A copy of the letter must be attached to each postage statement submitted for mailings of the approved piece. If requested by the Postal Service, the mailer must show that any pieces presented for mailing are the same as those tested and approved.

3 **Automation Addressing**

Overview

In Chapter 2, you learned that a mailpiece's design greatly affects the ease with which that piece can be processed and delivered. Two other elements vital to efficient processing and delivery are covered in detail in this chapter and Chapter 4: accurate addressing and barcoding.

Often, the most neglected part of a mailing is the quality of address information. However, mailers are becoming more aware of address quality issues. They know that, if an address isn't correct, the piece might not be delivered or might create a negative response to the mailing's message.

General Standards

For successful processing and delivery point barcoding by MLOCRs, the addresses on letter mail should be machine-printed, with a uniform left margin, and formatted in such a way that an MLOCR will be able to recognize the information and find a match in its address files.

A complete address is required so that an MLOCR can delivery point barcode the piece for the most precise point of delivery. In this way, you greatly improve the deliverability of your mailpiece. An MLOCR and the ZIP+4 database are better able to identify the correct delivery address the first time that the mailpiece is processed.

For faster, more accurate processing, include in the delivery address the street designators (for example, BLVD or DR); directionals (for example, NE or SW); the apartment, suite, or room number; and the ZIP+4 code.

MLOCRs can read a combination of uppercase and lowercase characters in addresses. Even though MLOCR enhancements now allow effective reading of punctuation in addresses, it still is suggested that punctuation be omitted when possible.

Whether or not punctuation is included in the address, the ZIP+4 code format is five digits, a hyphen, and four digits (for example, 98765-4321). The code eliminates guesswork about the intended destination.

For automation rates, the Postal Service requires mailers to prepare their mailings with addresses that have been verified and corrected using CASS-certified address matching software or processes. Your local mailpiece design analyst can provide you with more information.

For details on proper addressing, see Publication 28, *Postal Addressing Standards.*

Mailpiece Clear Zones on Nonbarcoded Mailpieces

Purpose

Several places on the address side of a mailpiece are reserved for addressing and related information only. These areas are the MLOCR read area, the barcode clear zone, and the return address area.

Address Block Location

Exhibit 3-1 shows the area on letter mail where address information should be located to be read by multiline optical character readers (MLOCRs). The automation specifications are as follows:

- The MLOCR read area requires only 1/2-inch margins on the left and right sides.

- The entire address (except the optional lines above the recipient line) should appear within an imaginary rectangle that extends from 5/8 inch to 2-3/4 inches from the bottom edge of the mailpiece, with 1/2-inch margins on the left and right sides. This is the requirement for any letter-size mailpiece.

- For pieces longer than 10-1/2 inches, the address should begin no more than 9-3/4 inches from the right edge.

Exhibit 3-1
Mailpiece Clear Zones and Free Space
(not drawn to scale)

Mailpiece clear zones (unshaded), for pieces up to 10-1/2 inches long

50% of length

33% of
height

Return Address Area

Postage
Area

2-3/4"
min.

MLOCR Read Area

Barcode Clear Zone

5/8"

1/2"
min.

1/2" min.

4-3/4"
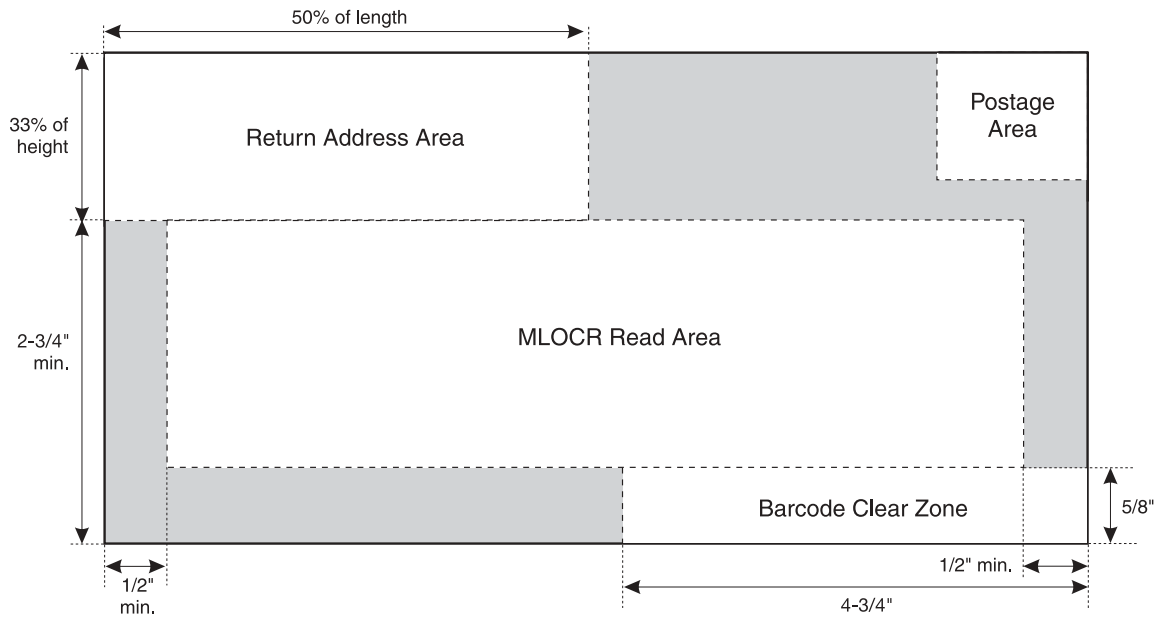
Mailpiece clear zones (unshaded), for pieces more than 10½ inches long

50% of length

33% of
height

Return Address Area

Postage
Area

2-3/4"
min.

MLOCR Read Area

Barcode Clear Zone

5/8"

4-3/4"

1/2" min.

9-3/4" max.
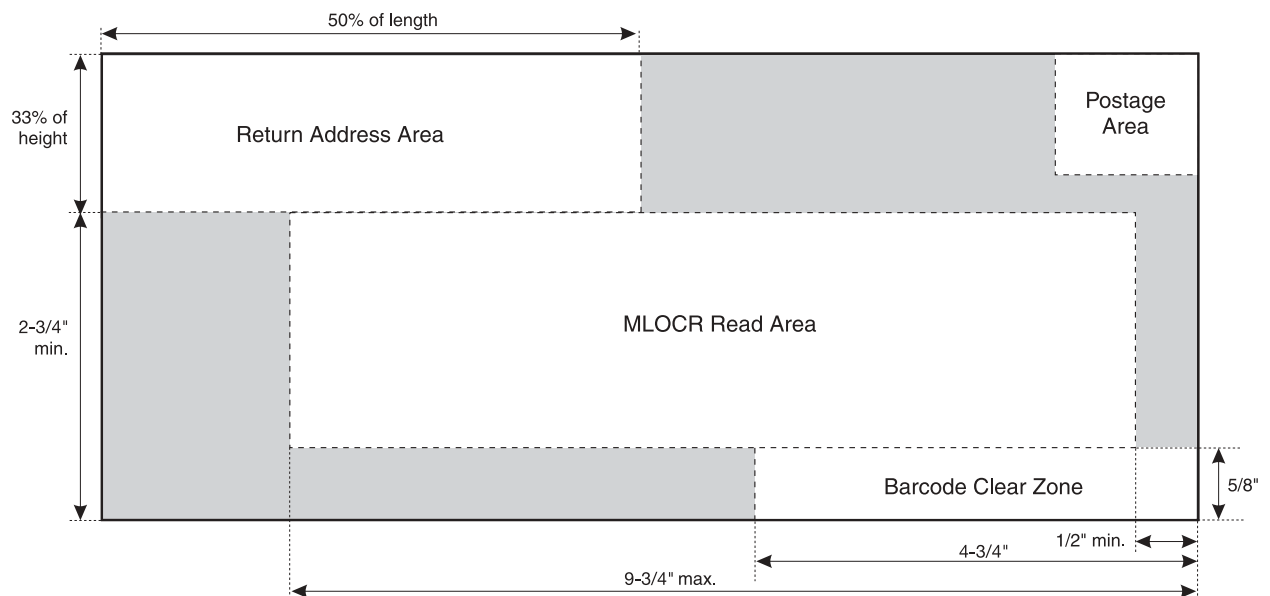
As Exhibit 3-1 shows, the area available for nonaddress printing increases as the address information is lowered in the MLOCR read area. Positioning the address block near the bottom of the MLOCR read area gives you the most free space for logos, advertising, and other nonaddress printing. If you barcode, even more space is available.

Nonaddress Printing

Extraneous (nonaddress) printing in the MLOCR read area can confuse MLOCR scanners and prevent them from interpreting the address information correctly. This can cause them to reject the mailpiece.

Nonaddress printing such as company logos, advertising, and die cuts should not be placed within the MLOCR read area. If it is, the lowest point must be *above* the delivery address line (see Exhibit 3-2). In other words, within the MLOCR read area, you should keep the space on either side of and below the delivery address line clear of all printing.

Exhibit 3-2
Nonaddress Printing Space (Unshaded Area)
(Not drawn to scale)
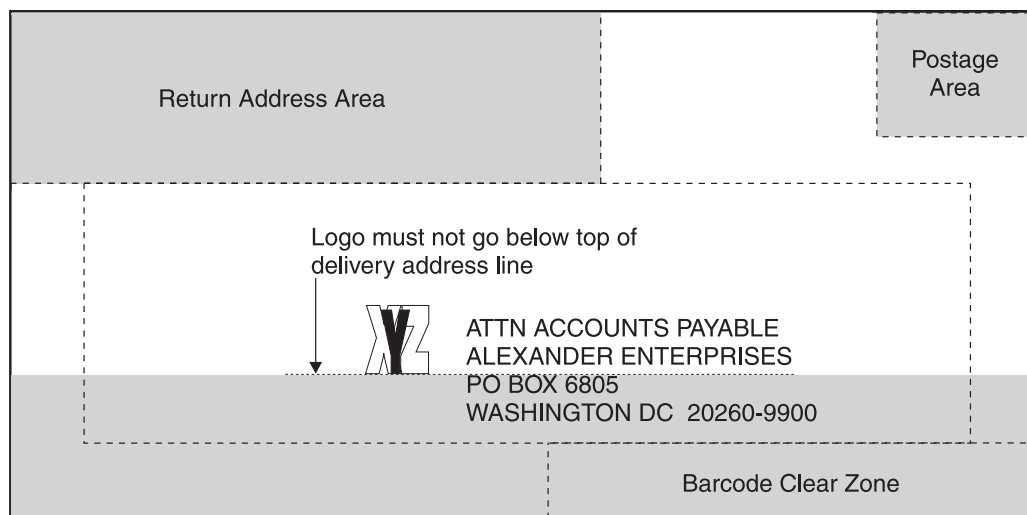
Return Address

You should always keep the MLOCR read area clear of return address information.

In addition to being positioned at least 2-3⁄4 inches above the bottom edge of the mailpiece, the return address should occupy an area in the far upper left corner of the mailpiece no longer than 50 percent of the length of the mailpiece as shown in Exhibit 3-1. The return address should be printed in a type size smaller than the type size used in the delivery address.

Barcode Clear Zone

After reading the address, the MLOCR prints the appropriate delivery point barcode in the lower right corner of the mailpiece. To ensure that the barcode is readable by barcode sorters, the barcode clear zone shown in Exhibit 3-1— 5⁄8 inch high by 4¾ inches long—must be clear of all printing, markings, and colored borders. Certain types of coated paper should be avoided.

Address Printing Guidelines

Type Style

Some type faces have serifs, which are short lines that decorate the ends of letter strokes. Because type faces that have no serifs (called "sans serif" faces) are more easily read by MLOCRs, these styles are recommended for printing the delivery address.

Display Type

Type faces (like Helvetica) with specific characteristics (like Helvetica normal 12 point) are called fonts. As a rule, do not use fonts defined as bold, extended, or condensed (see Exhibit 3-3). Also, do not use italic, highly stylized, or script-like fonts.

Exhibit 3-3
Unacceptable Type Styles

BOLD *Italic*

EXTENDED *Stylized*

CONDENSED *Script*

Preferred vs. Flat-Top Characters

Also, avoid type styles that can be misread by MLOCRs. These include styles with "flat-top" threes (which can be misread as fives) and "flat-top" sixes or nines (which can be misread as eights) (see Exhibit 3-4).

Exhibit 3-4
Preferred vs. Flat-Top Characters

Preferred   Not Recommended

Dot Matrix Characters

Dot matrix characters can be read by MLOCRs if the dots that form each character touch one another or are not separated by more than 0.005 inch (see Exhibit 3-5).

Exhibit 3-5
Dot Matrix Characters
(not actual size)
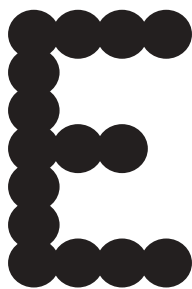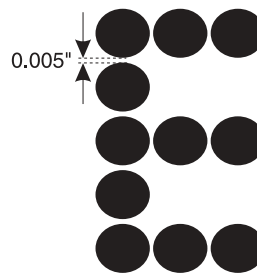
Preferred Spacing   Maximum Spacing

Type Size

MLOCRs can recognize type sizes between 8 and 18 points (see Exhibit 3-6). A point is a printing unit equal to about 1/72 inch. The recommended type size is 10 to 12 points for maximum MLOCR recognition.

If you use type as small as 8 points for an address, you should print the address in all uppercase characters to satisfy the MLOCR's minimum height and width requirements. In some type styles, 8-point uppercase characters do not meet the minimum 0.080-inch height requirements of MLOCRs.

If you use 18-point type, you should check that the characters are not taller than the maximum size shown on Notice 67, *Automation Template.* Some styles of 18-point type are larger than others.

Exhibit 3-6
Type Sizes

8 Points (Minimum)
10 Points (Preferred)
12 Points (Preferred)

18 Points (Maximum)

Character Stroke Width

The stroke is the line or lines that form each character (see Exhibit 3-7). For MLOCR processing, it is important that character stroke width be uniform throughout each character. Character height must also be within a minimum and maximum thickness range (between 3⁄4 and 2 points). Common sans serif type styles satisfy this requirement.

Exhibit 3-7
Character Stroke Width
(not drawn to scale)

stroke width

3/4 point min.
2 points max.

stroke width
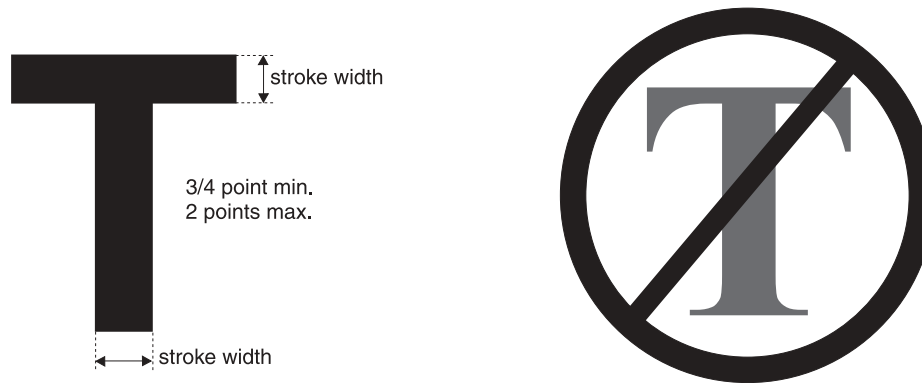
Character Spacing

To identify each character in the address, the MLOCR must see a clear vertical space between the characters. Spacing between 3⁄4 and 3 points is acceptable.

However, 1-point character spacing is recommended. Kerning—the overlapping or nesting of characters for special effects and appearances—may not be used for printing address information (see Exhibit 3-8).

Exhibit 3-8
Character Spacing
(not drawn to scale)

1 point
min.

Word Spacing

To separate each word in the address, the MLOCR requires a horizontal clear space that is at least equal to the width of one full-size capital M (see Exhibit 3-9). Spacing between words should not exceed five of these character spaces. This includes spacing between the two-letter state abbreviation and the ZIP Code information.

Exhibit 3-9
Word Spacing
(not drawn to scale)

M   MM
ARLINGTON VA   22209-2240
1 em
min.
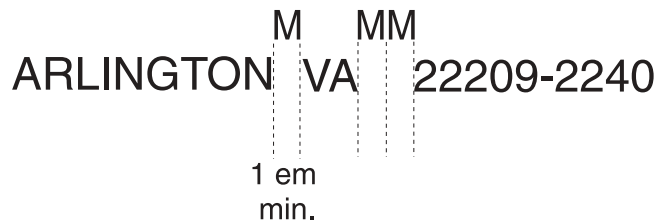
Line Spacing

To separate each line in the address, the MLOCR requires a vertical clear space that is at least 2 points (see Exhibit 3-10). The maximum space between lines is the height of two full-size characters.

Exhibit 3-10
Line Spacing
(not drawn to scale)

111 APPLE LN   111 Apple Ln
2 points min., 2 characters max.
REDDING CA   Redding CA

Address Block Skew

If the address block is slanted too much, the MLOCR might not be able to see a clear vertical space between each character. For this reason, the address should not be slanted (or skewed) more than 5 degrees relative to the bottom edge of the mailpiece (see Exhibit 3-11). This standard is especially important for the proper application of address labels.

Exhibit 3-11
Address Block Skew
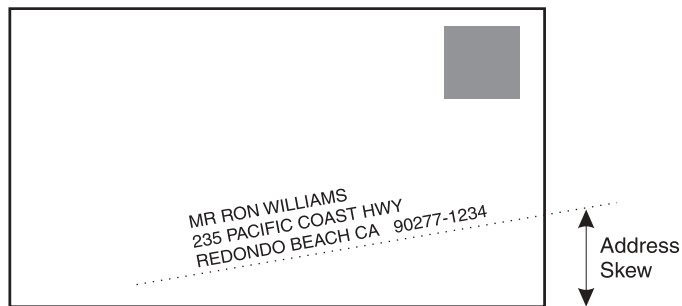
Interfering Print

You should avoid using preprinted forms, labels, or inserts containing lines (such as dotted rules for address placement), outline boxes (such as borders for address placement), or prompting words (such as "TO:") in the address area. These nonaddress elements can interfere with MLOCR recognition of the delivery address.

Print Quality

Print quality is one of the most important factors for successful MLOCR processing. Address characters should be clean, sharp, dark, and uniformly printed. Smudges, fill-ins, voids (inking gaps within characters), and splatter (extraneous ink outside character boundaries) can adversely affect MLOCR processing. The printer, typewriter, or ink jet printer should be checked and cleaned often to ensure crisp, clear printing.

Reflectance and Print Contrast

Reflectance

The ability of paper to reflect light is also an important factor for MLOCR recognition. The surface containing the address— whether an envelope, card, label, or insert—should be light enough in color to reflect a sufficient amount of light to the MLOCR's scanner. Although a white background is preferred, pastels and many other light colors are acceptable. Your mailpiece design analyst can provide you with a list of acceptable background colors.

You can check background reflectance with a USPS envelope reflectance meter or its equivalent. A reading of at least 50 percent in the red portion and 45 percent in the green portion of the optical spectrum is desirable.

Paper stocks used for envelopes and cards—as well as inks used for addresses and any other printing on the outside of letter-size mail—should not be fluorescent or phosphorescent. The glow from such paper stocks and inks can cause malfunctions during mail processing.

For window envelopes and labels, the MLOCR works best if the reflectance of the insert or label is about the same as that of the envelope. Some envelope inserts (checks, for example) are printed with a background pattern that can confuse the MLOCR. Designs and printing in the background might appear attractive to the human eye, but they can be mistaken for part of the address information by the MLOCR.

For the greatest contrast and best performance on MLOCRs and BCSs, the address should be printed in black ink on a white background. Several color combinations are also acceptable if the ink is dark enough and the background is light enough.

Resolve any issues about print, design, and color with your mailpiece design analyst before you produce your mailpiece. We can work with you to design an effective mailpiece and ensure quality processing.

Print Contrast Ratio

Print contrast ratio (PCR) is the contrast between the background and the printed address characters. This contrast can be measured with a USPS envelope reflectance meter or its equivalent.

A PCR of at least 40 percent in both the red and the green portions of the optical spectrum is needed. Reverse printing (white or light-colored characters on a dark background) is not MLOCR-readable and therefore not acceptable.

The inks used for addresses—and any other printing on the outside of letter-size mail—should not be fluorescent or phosphorescent. The glow from such inks can cause malfunctions during mail processing operations.

Background patterns that appear solid to the human eye but are printed in a halftone screen can interrupt MLOCR recognition. The dot structure in halftone screenings should be at least 200 dots (or at least 100 pairs of lines) per inch or at least a 20 percent screen (dot size).

Other background patterns with a PCR greater than 15 percent in the red and the green portions of the optical spectrum should not be used in the MLOCR read area.

Measurement of Reflectance and PCR

Appendix A contains detailed definitions and formulas for determining background and ink reflectance. Appendix B contains calibration standards and measurement information for instruments capable of making optical reflectance and contrast measurements.

A list of readable color combinations is not included in this publication because of the wide range of variables that exists among different background materials and ink types. However, your mailpiece design analyst is available to help you select the proper color combination for your mailpiece.

When color combinations must be considered and no means of measuring reflectance and contrast are available, the recommendation is to choose the lightest acceptable background color and the darkest acceptable ink color.

Refer questionable address background and printing colors to a mailpiece design analyst for testing.

4 POSTNET Barcodes

Overview

In Chapter 3, you learned that proper address information is important and that an incorrect address may mean that the piece will not be delivered or will create a negative response to your message.

In this chapter, you will learn about barcoding. Barcoding is also an important aspect of mailpiece design.

Because there are no MLOCR readability requirements for barcodes, you have more latitude in selecting colors, type styles, and the location for address printing if you barcode your mail.

To receive automation discounts, your letter-size mailings must be 100 percent delivery point barcoded. Nonbarcoded pieces enter the same mailstream as a nonautomation presorted mailing.

Description and Benefits

The POSTNET (POSTal Numeric Encoding Technique) barcode was developed by the Postal Service to encode ZIP Code information on letter mail for rapid and reliable sorting by BCSs. The POSTNET barcode can represent a five-digit ZIP Code (32 bars), a nine-digit ZIP+4 code (52 bars), or an eleven-digit delivery point code (62 bars).

Delivery Point Barcode

The delivery point barcode (DPBC) was developed by the Postal Service to identify each of the 134 million delivery points in the United States. This barcode system significantly reduces the time it takes carriers to sort letter mail before delivery.

The DPBC is formed by adding 10 bars to an existing ZIP+4 barcode (see Exhibit 4-1). The 10 bars represent two additional digits (normally the last two digits of the street address, post office box, rural route number, or highway contract route number). DMM C840 contains address coding rules for the DPBC, including rules for handling address anomalies.

Exhibit 4-1
Delivery Point Barcode
(not actual size)

MARK POLLAN
101 MAIN ST
ANYTOWN US 12345-6789

ZIP Code ——————→ ←—— + 4 ——————→ ← Delivery Point ►◄

Correction character
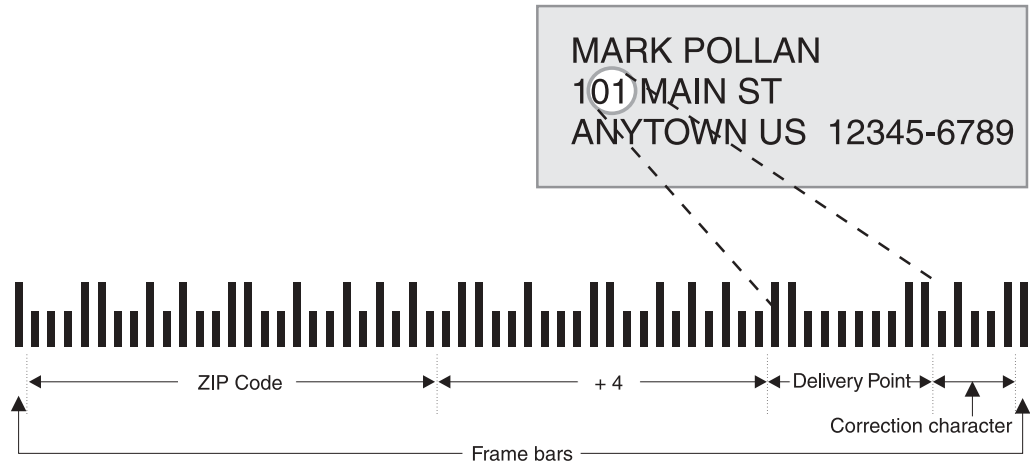
Frame bars

POSTNET Format

Description

The POSTNET barcode is always printed in a format that begins and ends with a frame bar (full or tall bar). To ensure POSTNET accuracy during mail processing, a correction character (five bars) must be included immediately before the rightmost frame bar of all POSTNET barcodes (see Exhibit 4-3).

The correction character is always the digit that, when added to the sum of the other digits in the barcode, results in a total that is a multiple of 10. For example, the sum of the ZIP+4 barcode 12345-6789 is 45. The next higher multiple of 10 is 50, so the correction character is 5 (50 minus 45).

Nine-Digit ZIP+4 Code (52 Bars)

The distance from the leading edge of the first (leftmost) bar to the leading edge of the fifty-second (rightmost) bar should be at least 2.125 inches. The distance from the leading edge of the first bar to the trailing edge of the fifty-second bar should not exceed 2.575 inches. ZIP+4 barcodes are used only with reply mail letter-size pieces.

Eleven-Digit Delivery Point Code (62 Bars)

The distance from the leading edge of the first (leftmost) bar to the leading edge of the sixty-second (rightmost) bar should be at least 2.540 inches. The distance from the leading edge of the first bar to the trailing edge of the sixty-second bar should not exceed 3.075 inches (see Exhibit 4-2 for general specifications).

Exhibit 4-2
POSTNET Barcode Specifications
(not drawn to scale)

Pitch 22 ±2 Bars/Inch
0.0500" Nominal
0.0416" Nominal

Full Bar Maximum Character Outline (gray)

Full Bar Minimum Character Outline (black)

Half Bar Maximum Character Outline (gray)

Half Bar Minimum Character Outline (black)

0.135"

0.115"

Space Between Bars
0.012" Minimum
0.040" Maximum

0.040"

0.060"

0.015"

0.015"

0.025"

0.025"

Height: 0.125" ± 0.010"
Width: 0.020" ± 0.005"

Height: 0.050" ± 0.010"
Width: 0.020" ± 0.005"
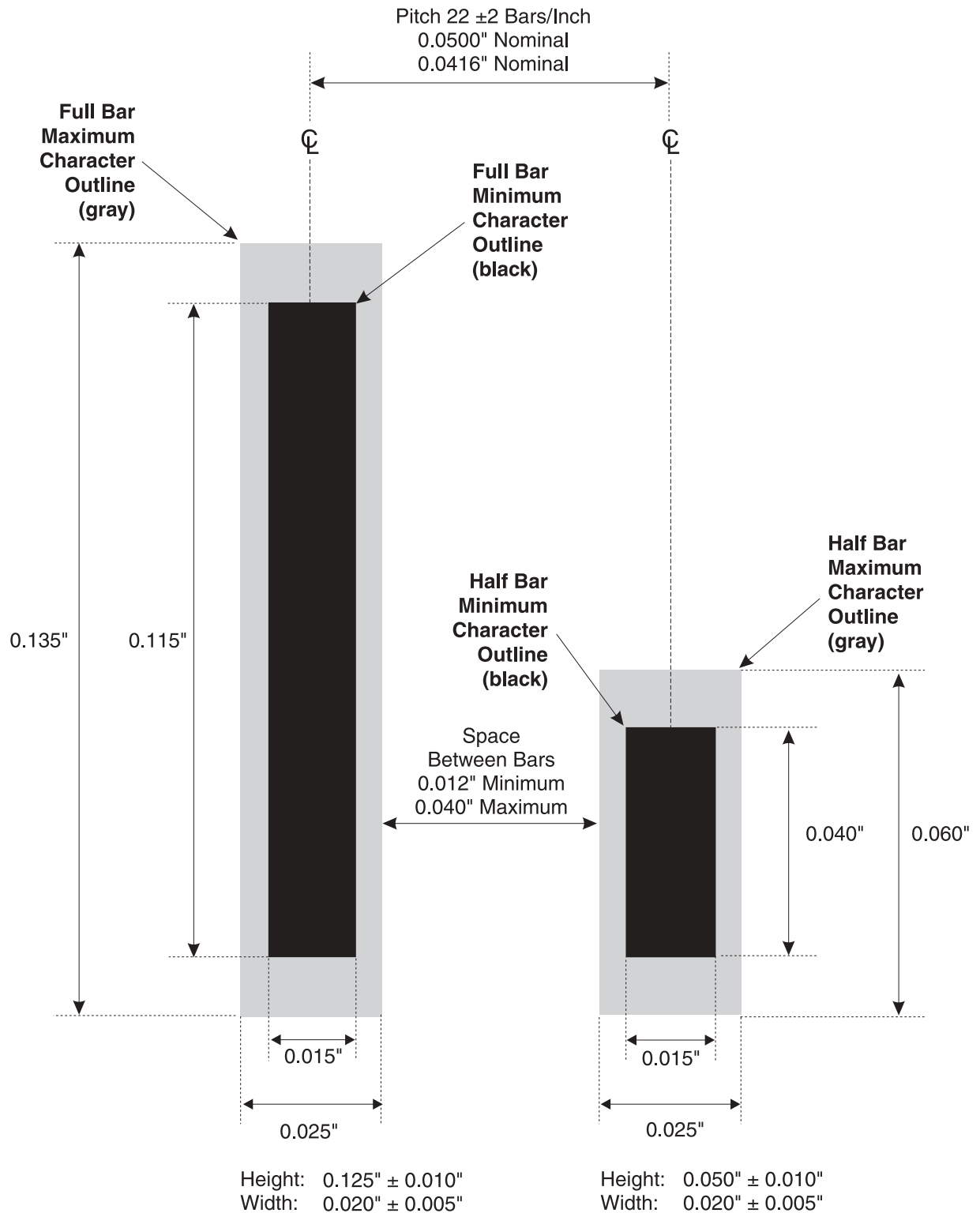
Decoding POSTNET Barcodes

The first and last full bars in a barcode—the frame bars—do not count. Each digit (numeric value) of the ZIP Code or ZIP+4 is represented by five bars.

The last five bars in the barcode make up the correction character. All barcodes, when added together, must equal a multiple of 10. Exhibit 4-3 shows a barcode decoded using the POSTNET code.

Exhibit 4-3
Delivery Point POSTNET Format
(not actual size)

Left Frame Bar

Right Frame Bar

Correction Character

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 4 |

5-Digit ZIP Code   +4 Code   Delivery Point
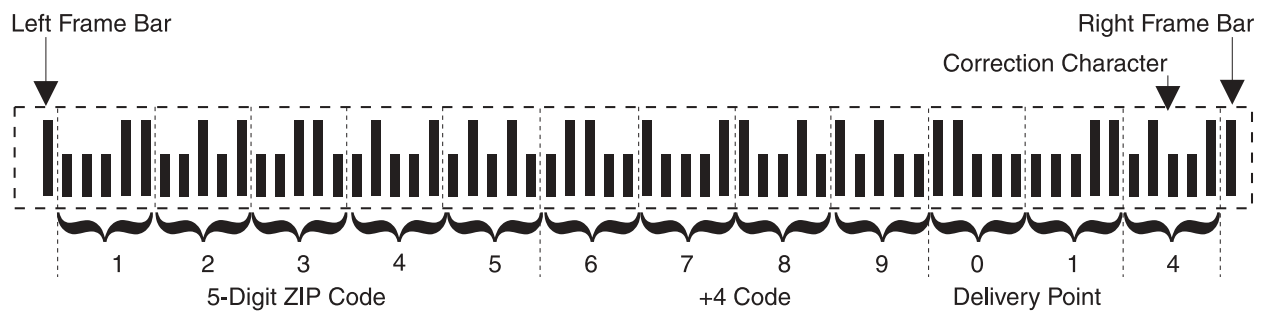
Code Elements

The basic elements of the POSTNET barcode are binary digits, represented as full bars and half bars (or tall bars and short bars). A full bar represents "1" (one) and a half bar represents "0" (zero) (see Exhibit 4-4).

The geometry of the bars and their proper location on letter mail are covered in the following sections and exhibits.

Exhibit 4-4
Code Elements

Numeric Value	Binary Code Value 7 4 2 1 0	Barcode Value 7 4 2 1 0
1	00011	
2	00101	
3	00110	
4	01001	
5	01010	
6	01100	
7	10001	
8	10010	
9	10100	
0	11000	

Code Characters

Each code character is made up of five bars, which together represent a single numeric digit. Specific combinations of two full bars and three half bars represent the digits 0 through 9. Only the 10 combinations shown in Exhibit 4-4 are valid code characters—they represent all possible combinations of two full bars and three half bars.

These combinations are central to the error-recovery of POSTNET because the system interprets as an error the combination of five bars containing other than two full and three half bars.

Bar Position Weights

Except for zero, the numeric value of each valid combination of five bars can be determined by adding the "weights" of the two positions occupied by the full bars ("1s"). From left to right, the bar positions are weighted 7, 4, 2, 1, and 0 (see Exhibit 4-4).

For example, the combination 01010 contains a full bar in the second position (weight 4) and in the fourth position (weight 1). Adding 4 and 1 yields 5 — the assigned value of this combination. The only exception is the combination 11000, which has a total weight of 11 but is assigned a value of zero.

Bar Spacing (Pitch)

Horizontal Spacing

The nominal horizontal spacing (pitch), defined as a bar and a space, must be limited to 22 bars (±2 bars) per inch when measured over any 1/2-inch portion of the barcode. The horizontal spacing at 24 bars per inch is 0.0416 inch and, at 20 bars per inch, is 0.050 inch. Between individual bars, there should be a clear space of at least 0.012 inch, but not more than 0.040 inch.

The dimensions described below should be maintained for eleven-digit POSTNET barcodes so that our BCSs can accommodate the tolerances encountered with different printing technologies.

Barcode Locations

Placement

If you apply the POSTNET barcode to your outgoing letter mail, you may print the barcode in the lower right corner or as part of the address block (see Exhibit 4-5).

MLOCR-applied barcodes are always printed in the lower right corner of the mailpiece.

Exhibit 4-5
Barcode Placement Areas
(not drawn to scale)

Leftmost edge of address block at 10 1/2" max. from right edge of envelope

1/2"   1/2"

4"   Address Block Barcode Read Area

Conventional Lower Right
Barcode Clear Zone

5/8"

4 3/4"
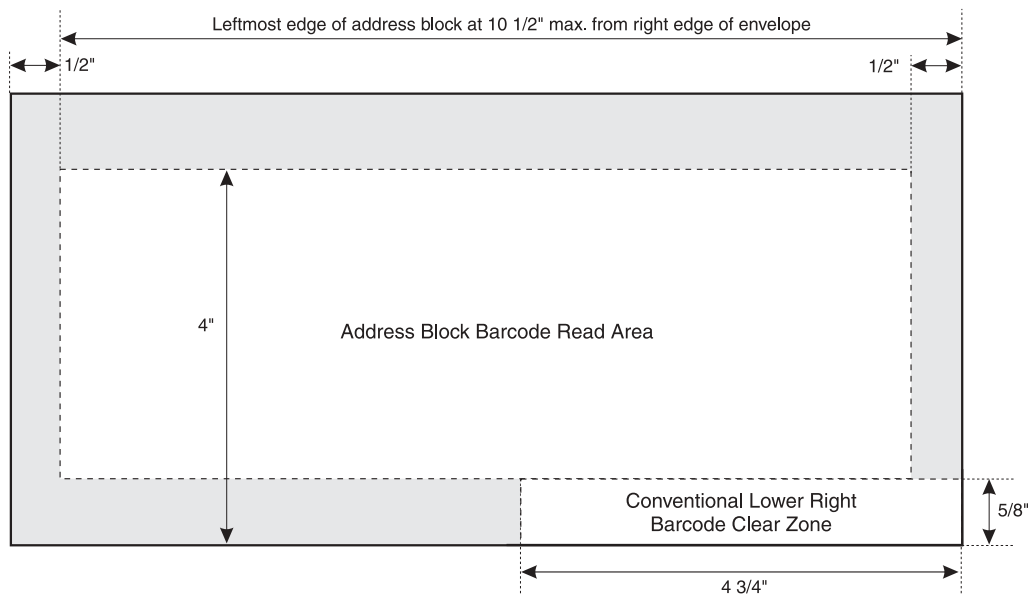
Address Block Barcoding

With this method, the barcode is not subject to the strict positioning requirements of the barcode clear zone. The address block barcoding option is the most desirable method. To print the POSTNET barcode as part of the address block, locate the barcode in one of the positions in Exhibit 4-6.

Barcode Clearances

An address block barcode requires certain clearances relative to any printing and the edges of the window or address label. This clearance allows the barcode sorter to successfully locate the barcode. As shown in the diagram below, a clear space of 1/25" is required above and below the barcode and 1/8" is required to the left and the right of the barcode.

Below are examples of acceptable barcode placement in address blocks.

Exhibit 4-6

Address Block Barcode Placement Options
(not drawn to scale)

Example A
Above Address
(Preferred)
Example C

Example B
Below Address
(Acceptable)
Example D

1/8"
(0.125")
min.

1/8"
(0.125")
min.

1/25"
(0.04") min.

1/25"
(0.04") min.

POSTAL CUSTOMER
123 MAIN ST
ANYTOWN US 98765-4321

POSTAL CUSTOMER
123 MAIN ST
ANYTOWN US 98765-4321

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

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

*******************************IT 98765

POSTAL CUSTOMER
123 MAIN ST
ANYTOWN US 98765-4321

#BXBJDCK ********5-DIGIT 98765
#JSN0069TWK2874#
POSTAL CUSTOMER
123 MAIN ST
ANYTOWN US 98765-4321
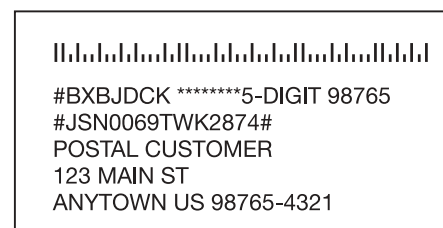
You may not apply the POSTNET barcode anywhere between the recipient line and the city, state, and ZIP Code line of the address (that is, do not place the barcode between any lines of the delivery address). Chapter 2 provides specifications for the clearance needed between address block barcodes and window edges, inserts, address labels, and other nonaddress printing.

Conventional Lower Right Corner

Delivery point barcodes printed in the lower right corner of letter mail must be positioned to meet the specifications shown in Exhibit 4-7. The first (leftmost) bar of the barcode should appear between 3-1/2 inches and 4-1/2 inches from the right edge of the mailpiece.

Exhibit 4-7
Lower Right Corner Barcode
(not drawn to scale)

Barcode Read Area · Barcode Clear Zone · 7/16" · 5/8" · 3/16" min. · max. · 3/10" min. · Leftmost bar 3-1/2" min., 4-1/2" max. · 4-3/4"
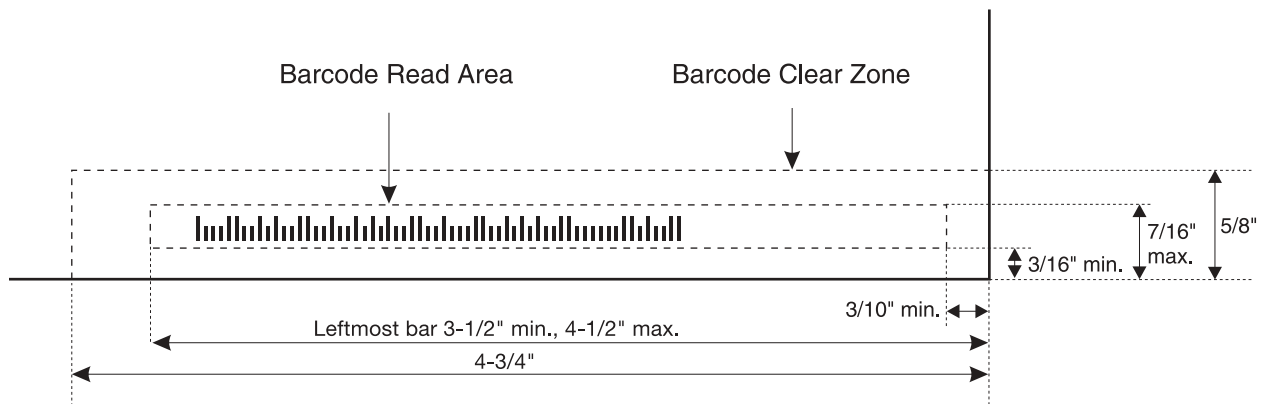
Barcode Layout

Bar Tilt

Two types of tilt can occur when printing POSTNET barcodes on a mailpiece (see Exhibit 4-8):

- Bar rotation, in which the individual bars are tilted (not perpendicular) with respect to the baseline of the barcode.

- Pattern skew (or slant), in which the entire barcode is tilted with respect to the bottom edge of the mailpiece.

Both types of tilt can occur simultaneously. Because BCSs read barcode bars individually, these sorters cannot determine which type of tilt is present. Consequently, total bar tilt should be measured with respect to a perpendicular from the bottom edge of the mailpiece. The combined effects of pattern skew and bar rotation must be limited to a maximum tilt of 5 degrees.

Exhibit 4-8
Bar Tilt
(not drawn to scale)

Bar Rotation

Pattern Skew

Combined Tilt
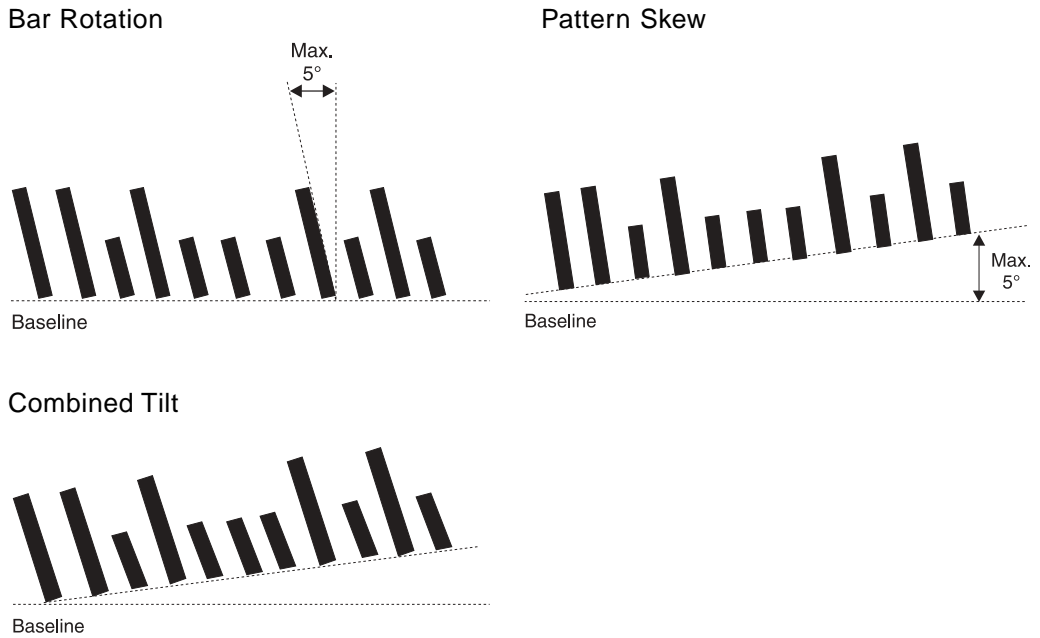
Baseline Shift

The vertical position of adjacent bars must not vary more than 0.015 inch from bar to bar when measured from the baseline (bottom) of the barcode (see Exhibit 4-9).

Exhibit 4-9
Barcode Baseline Shift
(not drawn to scale)

Acceptable Baseline Shift

Unacceptable Baseline Shift
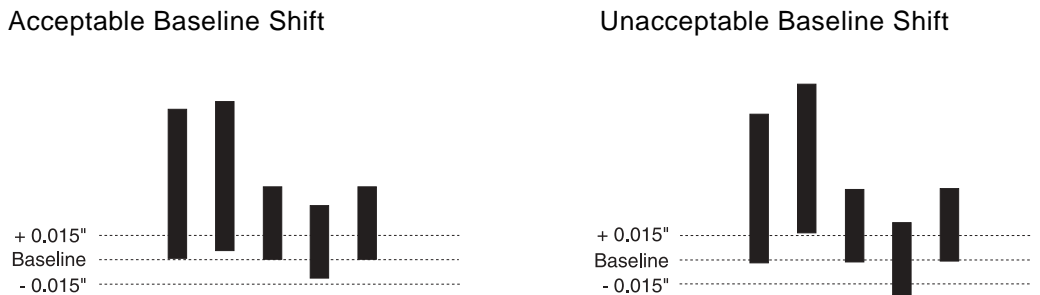
Barcode Printing

Background Reflectance

The area of the mailpiece where the barcode is to be placed (address block or lower right corner) should be uniform in color and produce a minimum reflectance of 50 percent in the red portion and 45 percent in the green portion of the optical spectrum, when measured with a USPS envelope reflectance meter or its equivalent.

Although a white background is preferred, pastels and other light colors are acceptable. The mailpiece should not be fluorescent or phosphorescent because the glow can cause malfunctions during mail processing.

Print Reflectance Difference

The BCS responds to the difference between light reflected from the printed barcode and the background. This difference is defined as print reflectance difference (PRD). A PRD of at least 30 percent in the red and the green portions of the optical spectrum is necessary for reading POSTNET barcodes. Like print contrast ratio (PCR), PRD can be measured with a USPS envelope reflectance meter or its equivalent (see Appendix A).

As with MLOCRs, BCSs respond best when the barcode is printed in black ink on a white background. Other color combinations are acceptable if the minimum PRD of 30 percent exists for the printed barcode. Refer questionable color combinations to your mailpiece design analyst for testing.

Overinking

Overinking, which causes any bar to exceed its maximum dimensions, can prevent the BCS from successfully interpreting the barcode (see Exhibit 4-10). Consequently, make sure that ink coverage does not cause any bar to exceed the height or width limitations.

Exhibit 4-10
Overinking (Extraneous Ink)
(not actual size)

Voids

A void, which reduces any bar to less than its minimum dimensions, can prevent the BCS from successfully interpreting the barcode. In Exhibit 4-11, a malfunctioning dot matrix printer created the voids. Ideally, dot matrix printing should yield dots that touch or overlap. If the dots are not touching, the space between the dots should not exceed 0.005 inch.

Exhibit 4-11
Voids
(not drawn to scale)

Preferred Spacing   Maximum Spacing   Unacceptable Spacing

0.005"
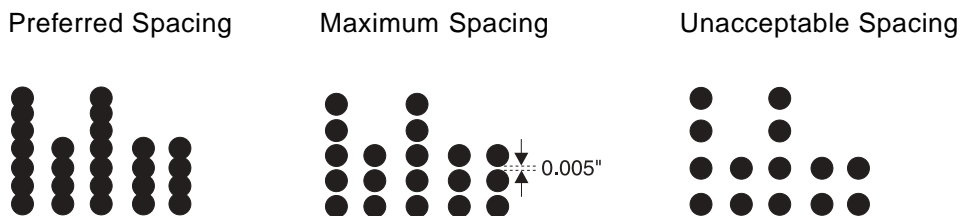
Extraneous Matter

Background patterns, envelope insert "show-through," and any other printing within the clear areas surrounding the barcode (lower right corner and address block areas shown in Exhibit 4-5) should be limited to a maximum PCR of 15 percent in the red and the green portions of the optical spectrum. A PCR exceeding 15 percent can interfere with barcode recognition.

Barcode Software and Hardware Certification

To help mailers evaluate the quality of their barcode-producing equipment, the Postal Service offers optional testing and certification to manufacturers of barcoding software and hardware. Certifying the barcoding equipment ensures that it can produce dimensionally correct barcodes that meet postal specifications.

Certification does not ensure that the barcodes produced from that equipment will meet the requirements for automation rates because many other variables (such as ink color and quality, paper color and contrast, and equipment operation and maintenance) affect the quality of the printed barcodes.

Manufacturers who want their products tested and mailers who want information on available certified products should contact the National Customer Support Center at 1-800-238-3150 or www.usps.com/ncsc.

5 Reply Mail

Basic Information

If your business receives most of its orders and payments by mail, your business depends financially on its incoming mail. Orders and payments are usually a response to a mailing to customers, which is why these responses are called reply mail.

Naturally, you want to get as many responses as you can, as quickly as you can. And the Postal Service wants to help you do just that. By using special reply mail formats and features, you can increase responses and receive them sooner.

Choosing Reply Mail Type

Basic Types

There are two basic types of reply mail—business reply mail (BRM) and courtesy reply mail (CRM)—and several specialized varieties. Although BRM and CRM are similar, there is a significant difference.

Business Reply Mail

Business reply mail (BRM) requires that postage be paid by you (the sender) if your customer (the respondent) mails the reply back to you. BRM is appropriate when your customer needs a little extra inducement to reply—in other words, the response or its timing is not assured. This type of reply mail is frequently used by direct marketers seeking orders, researchers pursuing questionnaire responses, or magazine publishers soliciting subscriptions (see Exhibit 5-1).

The extra inducement is provided because your customer does not need to affix the return postage, does not have to supply a postcard or envelope, and does not need to put an address on the mailpiece. Exhibit 5-1 shows a standard BRM piece in postcard and envelope formats.

Courtesy Reply Mail

Courtesy reply mail (CRM) requires your customer (the respondent) to affix the postage before mailing the reply back to you (the sender). CRM is appropriate when the response is more or less assured, such as for billings (see Exhibit 5-2).

Although the customer usually pays the return postage (unless you prepay it by a meter, as in meter reply mail (MRM); see page 96), the preaddressed postcard or envelope adds convenience and ensures addressing accuracy. Exhibit 5-2 shows a standard CRM piece in postcard and envelope formats.

Exhibit 5-1
BRM Postcard and Envelope
(not drawn to scale)
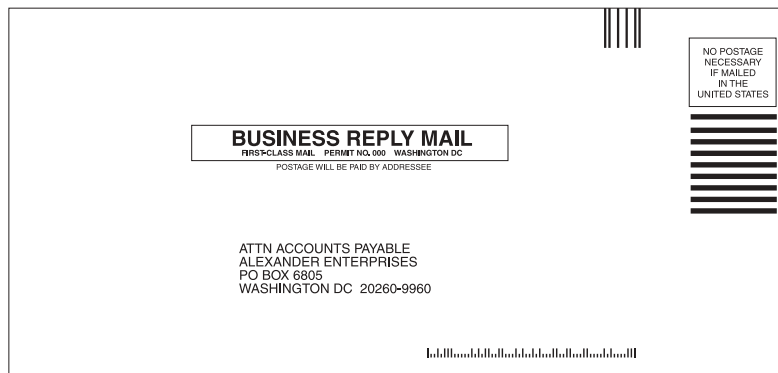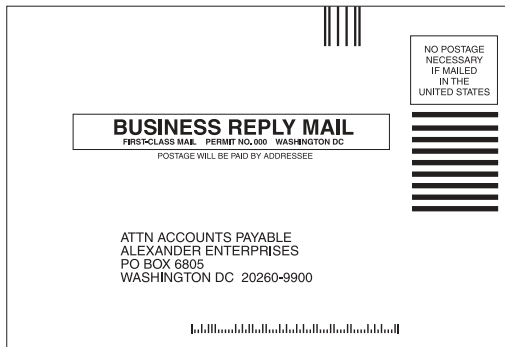
Exhibit 5-2
CRM Postcard and Envelope
(not drawn to scale)
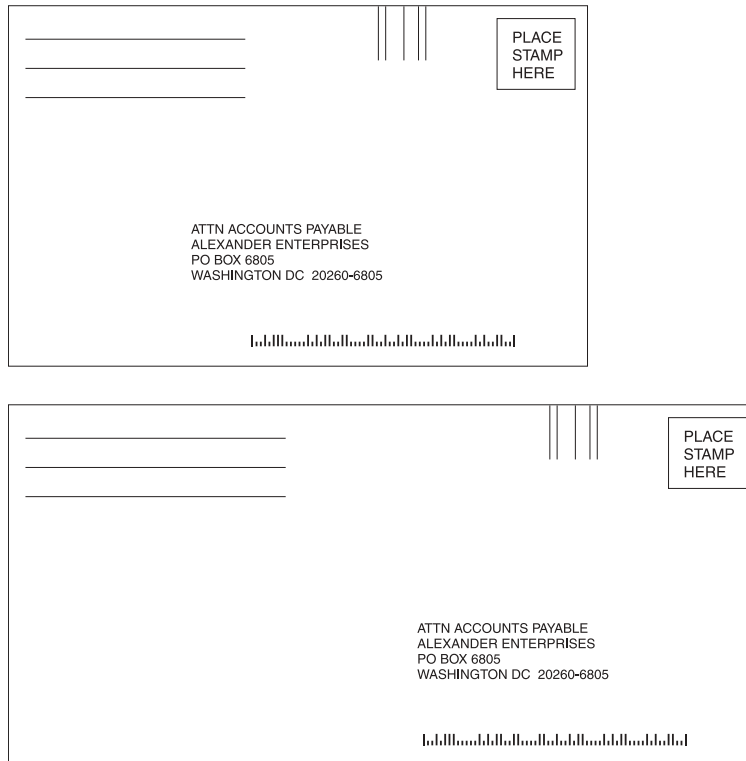
Benefiting From Reply Mail

Reply mail offers two major advantages: faster response and more accurate delivery.

The easier you make it for your customer to respond, the quicker the return will come. A preaddressed (and perhaps postage-paid) envelope containing the customer's order or check is easy to mail. Customers have positive attitudes about creditors, marketers, and fund-raisers who show foresight and consideration by providing reply mail cards, envelopes, or labels.

With BRM and CRM, your address is preprinted. This is especially important when you want payments and inquiries directed to an address that is different from your usual mailing address.

Because there is no chance that your customer can misaddress the mail to you, you eliminate potential misdeliveries. By using POSTNET barcodes on the envelopes—Chapter 6 explains how—you make sure that your reply mail benefits fully from USPS automated sorting equipment.

Meeting General Requirements

This publication shows you how to design envelopes or cards for letter-size reply mail. DMM S922 provides you with information on BRM services and mailing procedures.

All BRM customers must have unique ZIP+4 codes specific to BRM. Qualified Business Reply Mail (QBRM) customers must have unique ZIP+4 codes for each category of BRM piece (such as postcard, 1-ounce letter, or 2-ounce letter).

Selecting Facing Identification Marks

Description

The facing identification mark (FIM) is a pattern of vertical bars printed in the upper right portion of a mailpiece, to the left of the postage area. A FIM pattern is essentially a nine-bit code consisting of bars and no-bar placeholders. The presence of a bar can be considered a binary "1" (one); the absence of a bar, a binary "0" (zero).

The FIM patterns currently used translate into these binary codes:

- FIM A: 110010011.
- FIM B: 101101101.
- FIM C: 110101011.
- FIM D: 111010111.

Purpose

The FIM uses a code that tells automated processing equipment some of what it needs to know to do its job. The FIM allows automatic facing (orientation) of the mail for cancellation (postmarking). The FIM also identifies reply mail that bears a preprinted barcode. Barcoded mail is then routed directly to a high-speed barcode sorter, bypassing slower manual sorting or optical character reader (OCR) processing.

Use

Determine which FIM to use (see Exhibit 5-3) as follows:

- FIM A is used for CRM and MRM with a preprinted barcode.

- FIM B is used for BRM without a preprinted BRM ZIP+4 barcode.

- FIM C is used for BRM with a preprinted BRM ZIP+4 barcode.

- FIM D is used only with information based indicia (IBI) postage.

Exhibit 5-3
FIMs A, B, C, and D
(not drawn to scale)

FIM A

FIM B

FIM C

FIM D
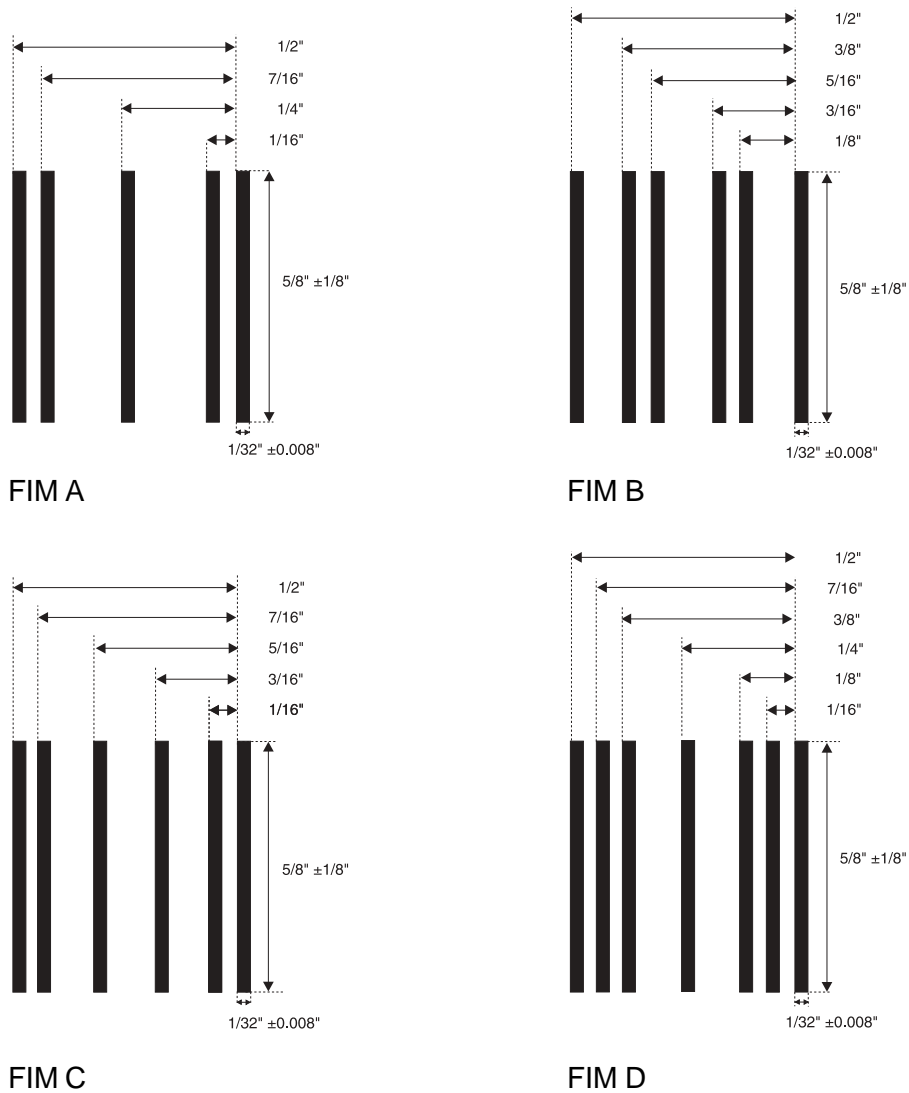
FIM Standards

Make sure the FIM meets the following standards:

- The FIM clear zone must contain no printing other than the FIM pattern. Exhibit 5-4 shows the configuration of the clear zone and the correct location of the FIM.

- The rightmost bar of the FIM must be 2 inches ±1/8 inch from the right edge of each mailpiece.

- The FIM bars must be 5/8 inch high ±1/8 inch and 1/32 inch wide ±0.008 inch.

- The tops of the FIM bars must be no lower than 1/8 inch from the top edge of each mailpiece. They may extend over the top edge to the flap.

- The bottoms of the FIM bars should touch the bottom edge of the FIM clear zone but must not be more than 1/8 inch above or below that edge.

Exhibit 5-4
FIM Location
(not drawn to scale)

FIM Clear Zone
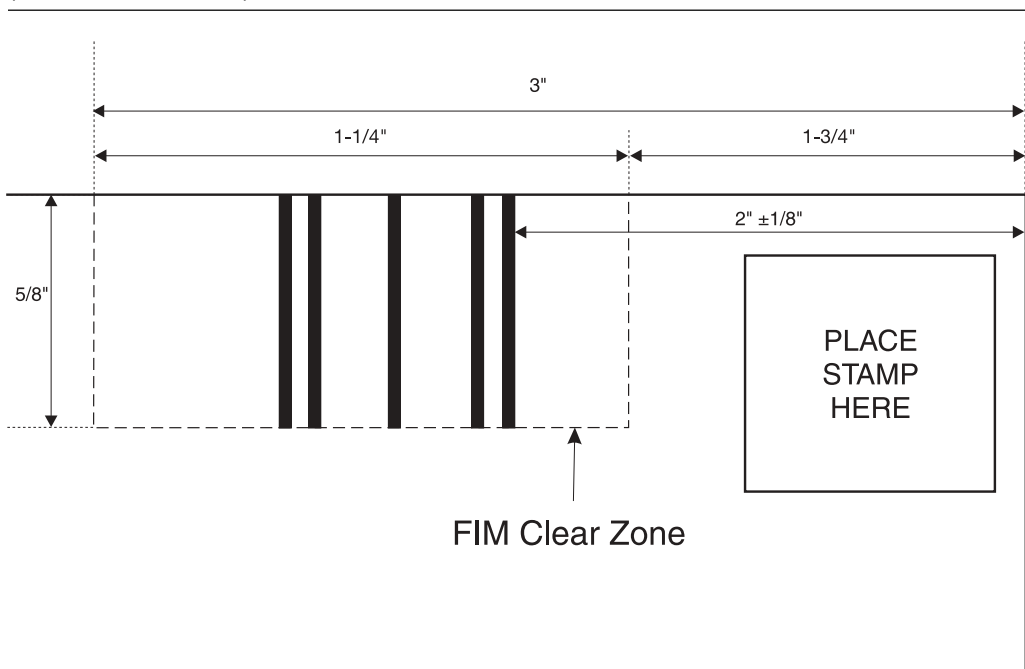
The PRD between the FIM's ink and the background material must be measured with Postal Service or Postal Service-licensed equipment. There must be at least a 30 percent PRD in the red and green portions of the optical spectrum. Black ink on a white background usually satisfies this requirement and is recommended.

In addition to the preceding requirements, FIM bars must be printed within the dimensions shown in Exhibit 5-3. The bars must be within 5 degrees of perpendicular to the top edge of the mailpiece.

FIM Positives

FIM bars must be printed within the dimensional tolerances in Exhibit 5-3. Camera-ready positives of FIM patterns provided at no charge by the Postal Service are $5/8$ inch high. These positives must not be reduced or enlarged.

Obtaining FIMs and Barcodes

It is not necessary to design a FIM or a barcode yourself for your reply mail. The Postal Service provides, at no charge, camera-ready positives of the FIM that you need to use and a camera-ready print of the barcode representing the correct ZIP+4 code and barcode or delivery point barcode as appropriate for your reply mail address (see Exhibits 5-5 and 5-6). Do not reduce or enlarge these positives and prints.

You can get these positives from your postmaster, account representative, or mailpiece design analyst. FIMs also are available on Postal Explorer at http://pe.usps.gov.

Exhibit 5-5
BRM Camera-Ready FIM and Barcode
(not drawn to scale)

|||‖| ALIGN
                        WITH
                        UPPER
                        RIGHT
                        CORNER

TO BE USED ONLY WITH FIM C (Business Reply Mail)
AND ZIP+4 CODE 20260-6600

ALEXANDER ENTERPRISES

CAUTION:
USE ONLY FOR ADDRESS BEARING
THE ZIP+4 CODE ABOVE.

                        ALIGN
                        WITH
                        LOWER
                        LEFT
                        CORNER

QC 007-002-001-71 |ılulllıoodıldılloodlloılloodloollooılloolld|

Exhibit 5-6
CRM Camera-Ready FIM and Barcode
(not drawn to scale)

‖ ‖| ALIGN
                        WITH
                        UPPER
                        RIGHT
                        CORNER

TO BE USED ONLY WITH FIM A (Courtesy Reply Mail)
AND ZIP+4 CODE 20260-6805

ALEXANDER ENTERPRISES

CAUTION:
USE ONLY FOR ADDRESS BEARING
THE ZIP+4 CODE ABOVE.

                        ALIGN
                        WITH
                        LOWER
                        LEFT
                        CORNER

QC 007-002-001-71 |ılulllıoodıldılloodlulıdlloodddlooıldıluld|

Avoiding Sorting Errors

Although preparing reply mail properly can benefit you and the Postal Service, errors can negate those benefits. For example, printing the wrong barcode on a reply piece can direct your mail to the wrong post office. A wrong barcode delays delivery of your mail and adds extra processing steps for the Postal Service.

Even though barcodes representing different delivery points can look nearly identical, the correct barcode is essential. The barcode used for regular mail delivery is different from the barcode used for BRM.

It's also easy to confuse different FIM patterns. So before you format and print reply mail, be sure that the barcode and FIM are correct for that use.

It is also important that you position the barcode and FIM properly on reply pieces if automated processing is to succeed. If part of the barcode lies outside the read area, the barcode might not be scanned accurately. In such cases, your mail is rejected by the BCS and must be sorted by hand or by slower machines. Use Notice 67, *Automation Template,* for correct positioning.

Mailpiece design analysts (MDAs) are assigned to business mail entry units (BMEUs) throughout the country to help you design your reply mail. To make sure that your piece achieves the best quality, provide samples of your BRM or CRM pieces to an MDA early in the design process, allowing time for changes before printing.

Obtaining BRM Permits

This publication guides you in designing reply mail. For information on other standards and application procedures (such as obtaining permits and submitting samples), contact your local post office.

Using Other Reply Services

This publication acquaints you with other services, including QBRM, MRM, and International Business Reply Service (IBRS). No matter which type of reply mail you use, you benefit from faster and easier returns of orders, inquiries, and payments.

6 Business Reply Mail

Receiving Customer Responses

BRM enables you to receive First-Class Mail back from customers while paying postage only on the pieces that your customers return. You may distribute cards, envelopes, self-mailers, and other types of mailpieces as BRM.

Following Design Formats

Exhibit 6-1 shows the six basic design elements required on a BRM piece. These elements are described and illustrated on the following pages.

To make sure that your mailpiece achieves the best quality, provide samples of your BRM pieces to a mailpiece design analyst early in the design process, allowing time for changes before printing.

Exhibit 6-1
BRM Design Format
(not drawn to scale)

1 Element 1—"No Postage Necessary" Endorsement

2 Element 2—Horizontal Bars

3 Element 3—FIM

4 Element 4—Business Reply Legend, Permit Number, Postage Endorsement

5 Element 5—Complete Delivery Address

6 Element 6—Barcode Clear Zone

Element 1: "No Postage Necessary" Endorsement

You must print the endorsement "NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES" in the upper right corner of your BRM pieces (see Exhibit 6-2). The left edge of the endorsement must not extend more than 1¾ inches from the right edge of the piece.

Exhibit 6-2
"No Postage Necessary" Endorsement
(not drawn to scale)

Element 2: Horizontal Bars

To help identify your mailpiece as BRM, you must print a series of horizontal bars below the "NO POSTAGE NECESSARY" endorsement on your BRM pieces. These bars must be uniform in length, thickness, and spacing. Each bar must be at least 1 inch long and 1/16 inch to 3/16 inch thick (see Exhibit 6-3).

There must be at least a 1/2-inch clearance between the right edge of the ZIP Code in the delivery address and the left edge of the horizontal bars. The bottom bar in the series must be above (not on or below) the top of the delivery address line—the next-to-last line in the address, just above the line with the city, state, and ZIP Code (see Exhibit 6-3).

Exhibit 6-3
Horizontal Bars
(not drawn to scale)

Element 3: Facing Identification Mark

You must print a FIM on all your letter-size BRM envelopes and cards and on business reply labels affixed to letter-size mail (see Exhibit 6-4). Flat-size BRM pieces do not require a FIM.

FIM B is used only with nonbarcoded BRM. Use FIM C for BRM *with* a preprinted ZIP+4 barcode. Mailers are encouraged to prebarcode BRM and use FIM C.

To use FIM B or FIM C, make sure that the FIM meets the standards on page 54.

Exhibit 6-4
FIM Location
(not drawn to scale)

Top of FIM bars must be within 1/8" of edge.

3"

1-1/4"

1-3/4"

2" ± 1/8"

5/8"

FIM Clear Zone: 1-1/4" x 5/8"

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST-CLASS MAIL   PERMIT NO. 000   WASHINGTON DC

POSTAGE WILL BE PAID BY ADDRESSEE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900
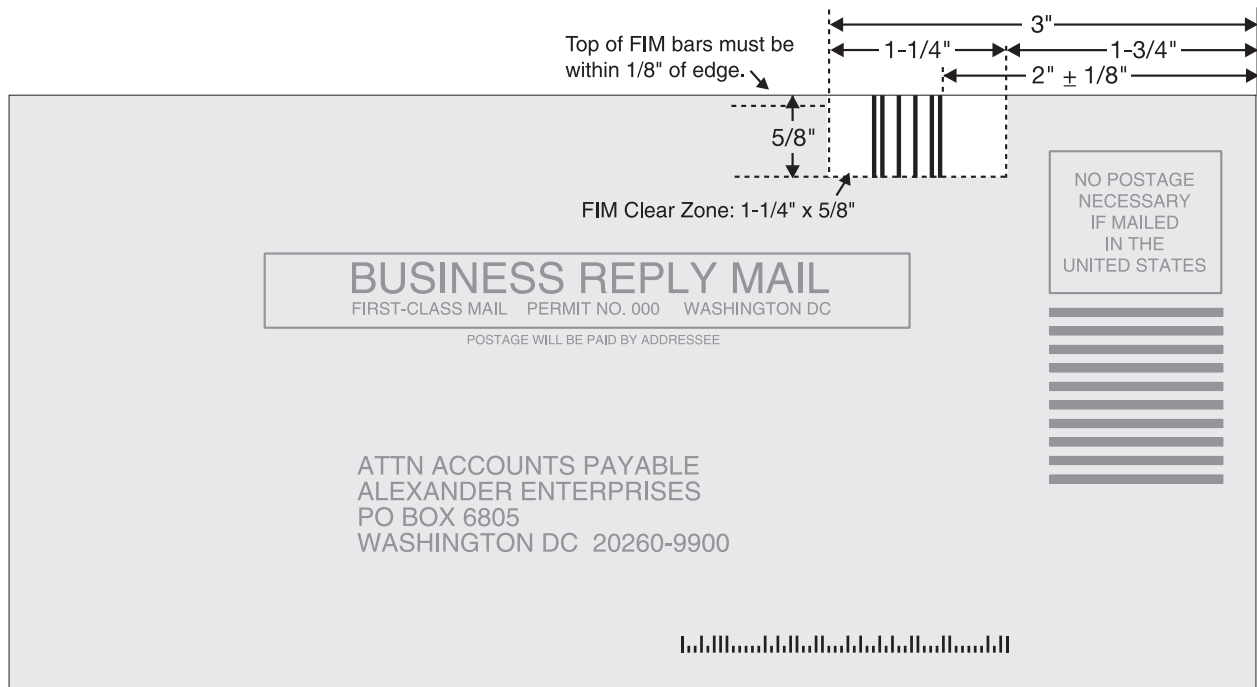
Element 4: Business Reply Legend, Permit Number, and Postage Payment Endorsement

You must print the business reply legend and associated lines on your BRM pieces. For the business reply legend box (see Exhibit 6-5), follow these requirements:

- You must place in capital letters "BUSINESS REPLY MAIL" above the complete delivery address. The letters must be at least 3/16 inch high. This line is the business reply legend.

- Below the business reply legend, you must place in capital letters "FIRST-CLASS MAIL," "PERMIT NO." followed by your permit number, and the issuing post office name (city and state). This line is the permit number line.

- You may enclose the business reply legend and permit number line in a rectangular box.

- Under this box, you must place in capital letters "POSTAGE WILL BE PAID BY ADDRESSEE." This line is the postage endorsement line.

- Official mail used by U.S. government agencies have additional standards for BRM (see DMM E060).

Exhibit 6-5
Business Reply Legend, Permit Number, Postage Endorsement
(not drawn to scale)

Element 5: Complete Delivery Address

You must use a complete delivery address on your BRM pieces. This address includes the name of the BRM permit holder, delivery address, city, state, and ZIP Code (see Exhibit 6-6). For letter-size pieces, all delivery address lines must appear within the MLOCR read area (see Exhibits 3-1 and 6-6).

The Postal Service assigns a unique ZIP+4 code specific to BRM. A unique four-digit add-on to denote BRM may not be used with a unique (firm) five-digit ZIP Code not specifically assigned to BRM.

The address on BRM must be that of the permit holder or of a representative of the permit holder authorized to use the BRM permit number. Contact your local post office for specific procedures about this process.

Exhibit 6-6
Complete Delivery Address Placement
(not drawn to scale)

Return Address Area

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL   PERMIT NO. 000   WASHINGTON DC

POSTAGE WILL BE PAID BY ADDRESSEE

2¼" maximum

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900

½" minimum
between bars
and ZIP Code

⅝" minimum
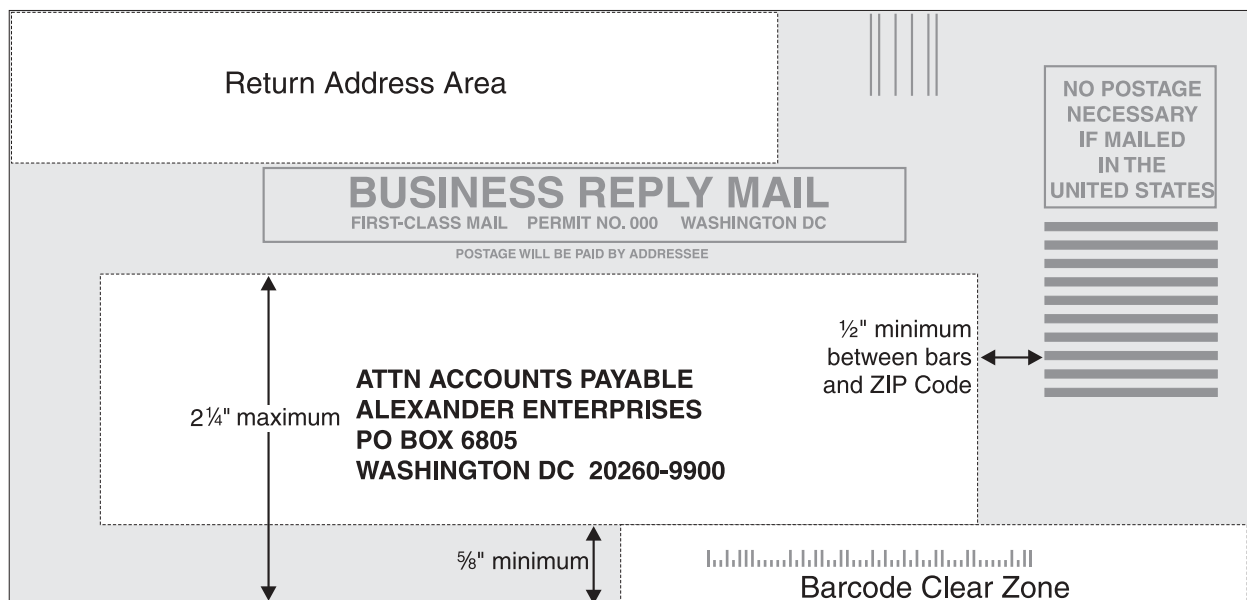
Barcode Clear Zone

Element 6: Barcode Clear Zone

You must maintain a clear zone for barcodes on your BRM pieces. This clear zone must measure 5/8 inch from the bottom edge and 4-3/4 inches from the right edge of the piece (see Exhibit 6-7).

The barcode must be within the barcode read area defined by the limits shown below (see also Exhibit 6-6).

- Horizontally, the leftmost bar must be between 3-1/2 inches and 4-1/4 inches from the right edge of the piece.

- Vertically, the barcode must be within the area between 3/16 inch and 7/16 inch from the bottom edge of the piece; the bottom of the bars must be 1/4 inch ±1/16 inch from the bottom edge of the piece.

For barcode placement options with address labels and window envelopes, see Exhibit 4-6, examples A and B.

Delivery point barcoding is not permitted on BRM pieces.

Exhibit 6-7
Barcode Clear Zone
(not drawn to scale)

BUSINESS REPLY MAIL
FIRST-CLASS MAIL   PERMIT NO. 000   WASHINGTON DC
POSTAGE WILL BE PAID BY ADDRESSEE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

5/8"

4-3/4"
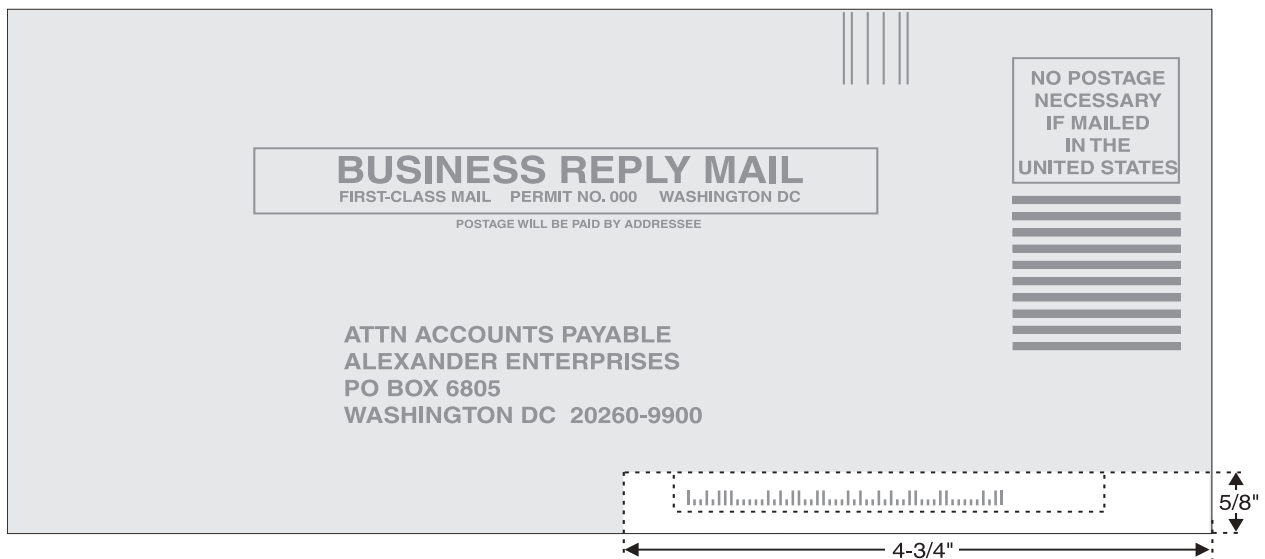
Exhibit 6-8 summarizes the specifications for BRM elements and dimensions.

Exhibit 6-8
Reply Mail Specifications
(not drawn to scale)
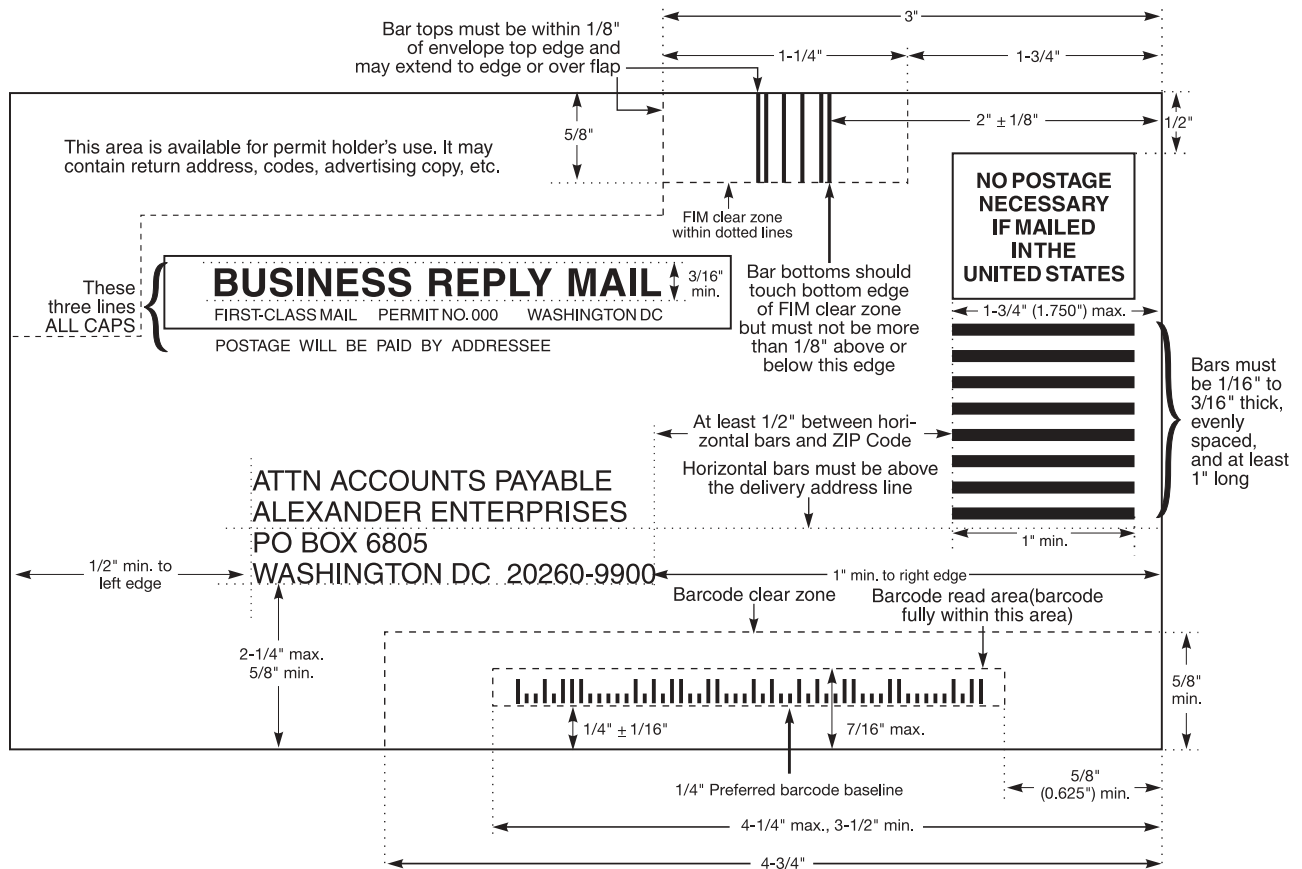
Meeting Size Standards

Physical Characteristics

For automated processing, your BRM pieces must be rectangular, have straight edges, and be within the dimensions shown in Exhibit 6-9.

Exhibit 6-9
Standard BRM Dimensions

BRM Dimension	—Card— Minimum	—Card— Maximum[1]	—Letter— Minimum	—Letter— Maximum
Height	3-1/2"	4-1/4"	3-1/2"	6-1/8"
Length[2]	5"	6"	5"	11-1/2"
Thickness	0.007"	0.016"	0.007"[3]	1/4"

1. These are the maximum dimensions for card-rate eligibility.
2. BRM letter pieces should not be less than 0.009 inch thick if they are more than 4-1/4 inches high or 6 inches long or both. (The dimension that parallels the lines of the delivery address is the length. The top and bottom of the mailpiece also parallel the delivery address lines.)
3. The minimum thickness is 0.009 inch if the length is more than 6 inches or the height is more than 4-1/4 inches.

Nonmailable Pieces

All pieces not meeting the minimum size standards in Exhibit 6-9 are nonmailable.

Nonmachinable Surcharge

Letter-rate BRM that weighs 1 ounce or less is nonmachinable and subject to the nonmachinable surcharge if it has any of the criteria under "Nonmachinable Characteristics" beginning on page 12. In addition, any such pieces are not eligible for the QBRM discount.

Meeting Printing Standards

Paper Weight

For BRM envelopes, you must use paper stock with a basis weight of at least 20 pounds (the weight of 500 17-by-22-inch sheets).

For cards, you should use card stock with a basis weight of at least 75 pounds or greater, with none less than 71.25 pounds (measured weight of 500 25-by-38-inch sheets). For BRM cards sent as QBRM, this basis weight is a minimum requirement. Cards also have a minimum thickness requirement (see Exhibit 6-9).

Paper Grain

You should orient the paper grain in cards parallel to the long dimension of the card. Long-grain cards are damaged less often than cards with the grain parallel to the short dimension of the card.

Dark Fibers

If your BRM pieces contain dark fibers, make sure that the print contrast ratio between the fibers and the material is 15 percent or less in the red and the green portions of the optical spectrum, measured with a reflectance meter produced or licensed by the Postal Service.

Legibility

You may use any legible printing process and typeface. Handwriting, typewriting, or hand-stamping may not be used for BRM lettering. Official mail used by government agencies has additional options (see DMM E060).

Printed Borders

You may not use printed borders on BRM letters and cards.

Print Reflectance

You may use any color ink if there is at least a 30 percent print reflectance difference (PRD) in the red and the green portions of the optical spectrum between the ink and the background material of the BRM piece, measured with a reflectance meter produced or licensed by the Postal Service.

Black ink on a white background generally satisfies this PRD requirement and is recommended.

Background Reflectance

You must make sure that the material used for your BRM pieces produce a background reflectance of at least 50 percent in the red portion and 45 percent in the green portion of the optical spectrum, measured with a reflectance meter produced or licensed by the Postal Service.

Material must have a fluorescence of no more than 4.0 phosphor meter units. Fluorescent colors generally do not meet this requirement. Fluorescent colors should be tested and approved by the Postal Service.

Halftone Screens

If the material on which the delivery address is to appear is printed in a halftone screen, the screen should be at least 200 lines per inch (dot size) or at least a 20 percent screen.

Providing Sealing

You may prepare envelopes for sealing with a variety of glues and gums that can withstand processing through Postal Service equipment. Any BRM piece is nonmailable if sealed with wax, clasps, string, staples, or buttons, or if all the edges are not straight.

Preparing Reply Cards

When preparing BRM cards, remember the following standards:

- Cards should be constructed of card stock with a basis weight of 75 pounds, with none less than 71.25 pounds (measured weight of 500 sheets of 25-by-38-inch sheets). For QBRM, this 75-pound basis weight is a minimum requirement.

- Cards should be constructed of stock free from groundwood unless coated with a substance to help the stock resist bending.

- Cards must be between 0.007 inch and 0.016 inch thick (see Exhibit 6-9).

- Cards are mailable but are charged at the regular First-Class Mail rate for letters if they exceed any of the following dimensions:

  - More than 4¼ inches high.

  - More than 6 inches long.

  - More than 0.016 inch thick.

Using Window Envelopes

General Requirement

Exhibit 6-10 shows a BRM envelope designed so that the delivery address and barcode are printed on an insert appearing through an open or covered window. Window envelopes must meet the specifications in this section.

Exhibit 6-10
BRM Window Envelope
(not drawn to scale)
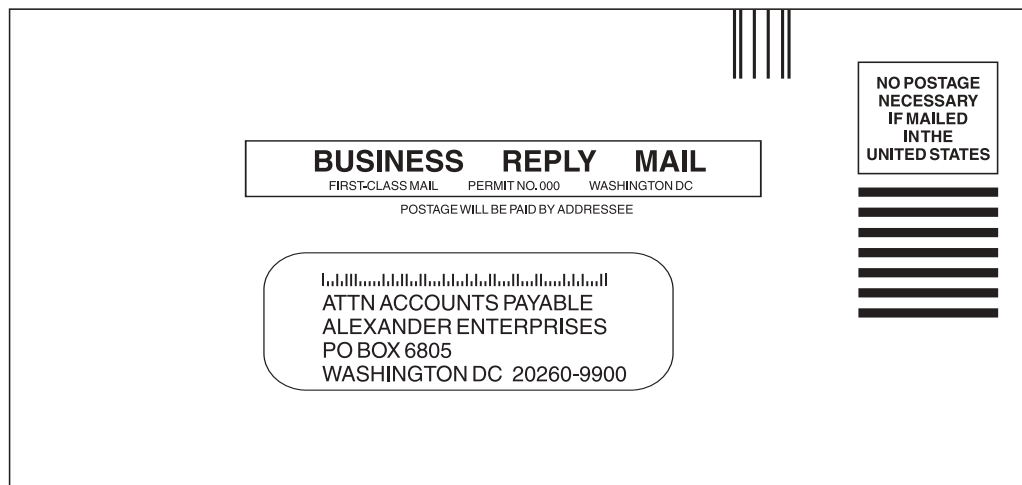
Format

You must print directly onto the address side of the envelope the "NO POSTAGE NECESSARY" endorsement, the horizontal bars, the FIM, and the business reply mail legend. Other required elements, including "FIRST-CLASS MAIL" "PERMIT NO.," city, state, "POSTAGE WILL BE PAID BY ADDRESSEE," and the permit holder's name and complete delivery address may be printed on the insert that appears through the window (see Exhibit 6-11).

Exhibit 6-11
BRM Window Alternate Format
(not drawn to scale)

Address Visibility

Regardless of how much the insert containing the address and barcode shifts inside the envelope, the entire address, including the barcode, must show through the window with at least a 1/8-inch clearance on all sides. This clearance must be maintained throughout the insert's full range of movement (shift) in the envelope.

No printing other than the elements already listed under "Format" may be visible through the window. The address must be readable through any window-covering material. The address and barcode must appear within the standards shown in Exhibits 6-11 and 6-12.

Exhibit 6-12
Address Clearance
(not drawn to scale)

Address clearance in window with barcode

1/8" minimum clearance

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900

1/8" minimum clearance

1/8" minimum clearance

1/8" minimum clearance
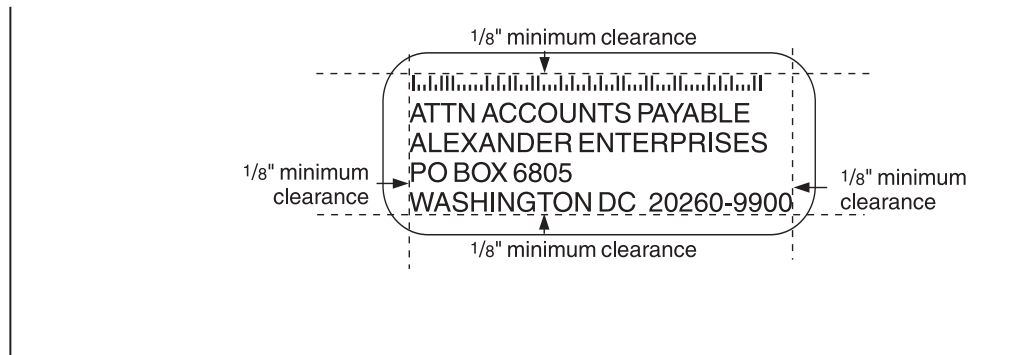
Address clearance in window without barcode

1/8" minimum clearance

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900

1/8" minimum clearance

1/8" minimum clearance

1/8" minimum clearance

Excessive insert shift

N ACCOUNTS PAYABLE
XANDER ENTERPRISES
BOX 6805
HINGTON DC 20260-9900
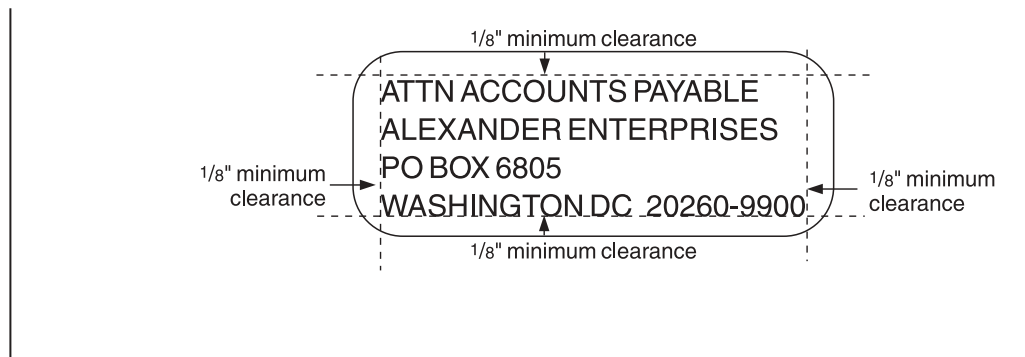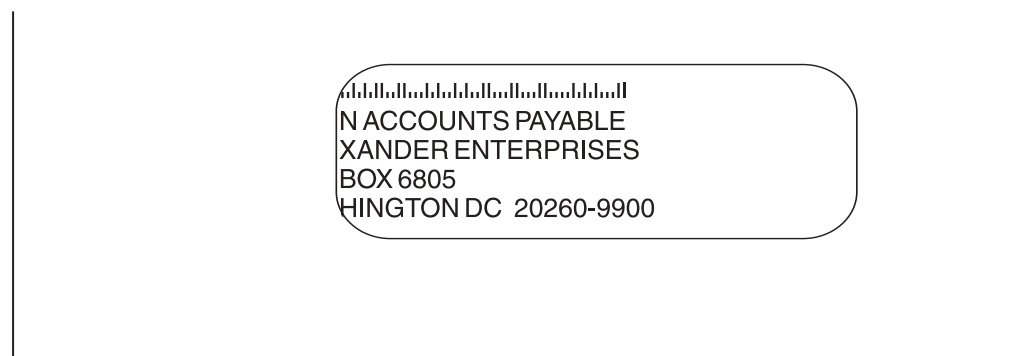
Window Placement

The bottom edge of the window must be at least 1/2 inch from the bottom edge of the envelope.

Self-Mailers

The standards for BRM self-mailers are outlined later in this chapter. Self-mailers must contain instructions to the user for folding and sealing the piece.

Reusable Mailpieces

A reusable mailpiece is an envelope designed for two-way mailing. The recipient removes part of the original mailpiece or refolds the piece to cover the original delivery address and to reveal the BRM format and the originator's delivery address for return.

The piece must be designed and constructed to allow the recipient to reconfigure or modify the piece to remove or cover the recipient's address, POSTNET barcode, postage, and any marking or endorsement on the piece when it was originally mailed.

The instructions on the piece must ensure that the recipient can reconfigure the piece correctly for remailing. See DMM C010.6.4 and 6.5 for more information about preparing reusable mailpieces.

Prebarcoding Your BRM

Purpose

Prebarcoding—that is, barcoding done by you rather than the Postal Service—is a great idea for all reply mail. It is mandatory for BRM enclosed in automation rate mailings or distributed under the QBRM program.

Prebarcoding allows the Postal Service to help you receive reply mail as quickly as possible. When you design BRM, you should benefit from barcoding at the same time.

Barcoded BRM must meet the requirements in the following sections.

FIM C

You must use FIM C on BRM. You can get a camera-ready positive of the FIM and your barcode at no charge from Postal Service account representatives and postal business centers. The art must not be enlarged or reduced.

Barcode

Address block barcoding of BRM pieces is permitted only when printed on an insert placed in a window envelope or on an address label affixed directly to the mailpiece. Otherwise, the barcode must be placed within the lower right barcode clear zone in accordance with Chapter 4 (see Exhibit 6-13).

Exhibit 6-13
Barcode Placement
(not drawn to scale)
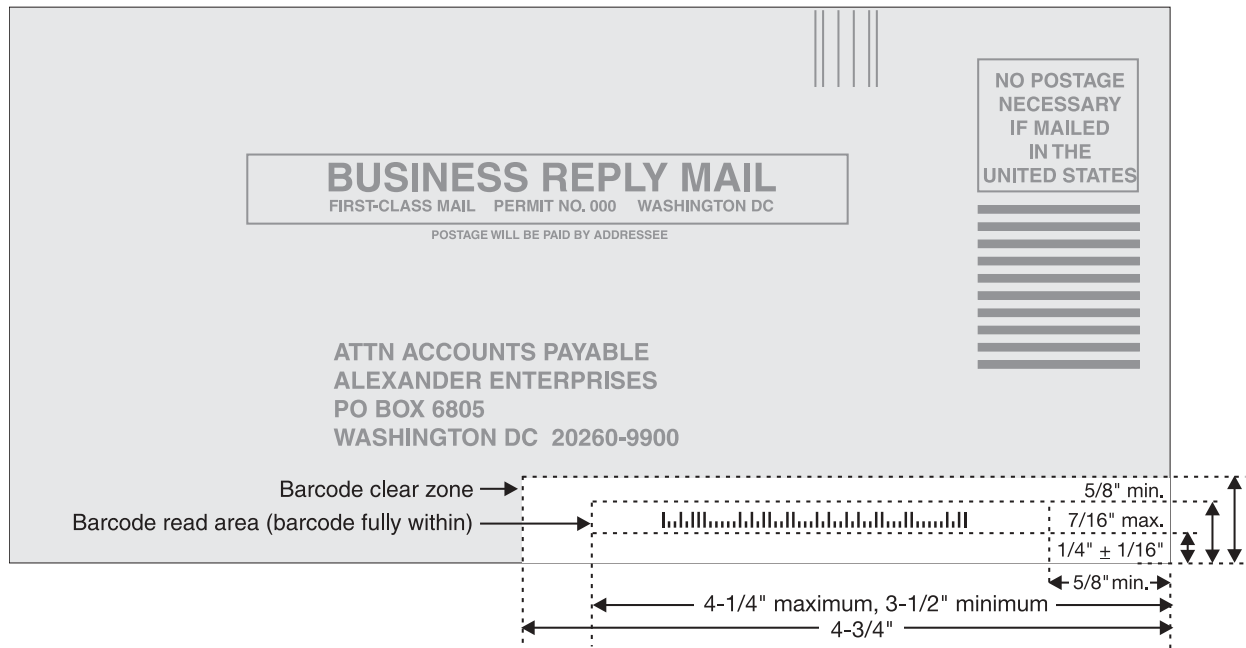
Delivery Point Barcode

Delivery point barcodes are not permitted on BRM.

Address Block Readability

A correctly formatted and readable address block is critical for BRM that is not prebarcoded and therefore must be scanned by MLOCRs. To make processing more efficient, follow these guidelines:

- Keep the left margin of the address block aligned.

- Use two-letter state abbreviations.

- Use capital letters without punctuation.

- Make sure that characters do not touch.

- Follow the standards in Chapter 3.

Adding Optional Elements

Company Logo

A company logo can be used. On prebarcoded BRM, place it no lower than ⅝ inch from the bottom edge of the piece. On nonbarcoded BRM, place it no lower than the top of the street address or the post office box line of the address. The logo must not be too close to the required business reply endorsements (see Exhibit 6-14).

Exhibit 6-14
Company Logo with Barcode
(not drawn to scale)

Attention or Information Line

If you use an attention or information line, place it above the company name or recipient line (see Exhibit 6-15).

Exhibit 6-15
Attention or Information Line
(not drawn to scale)

Permit Holder's Space

You may use the upper left corner of the address side of your BRM piece for the sender's return address, a company logo, an attention line, a distribution code, a form number, or other pertinent information (see Exhibit 6-16).

Exhibit 6-16
Permit Holder's Space
(not drawn to scale)

Using BRM Varieties

Business Reply Labels

A business reply label is an adhesive label that meets the BRM label criteria. You (the sender) provide the label to your customers and they (the respondents) affix them to their own envelopes.

Exhibit 6-17 shows a business reply label affixed to a letter-size piece. Except as noted, all other BRM format requirements apply. Business reply labels may not be distributed under QBRM.

Exhibit 6-17
Business Reply Label
(not drawn to scale)
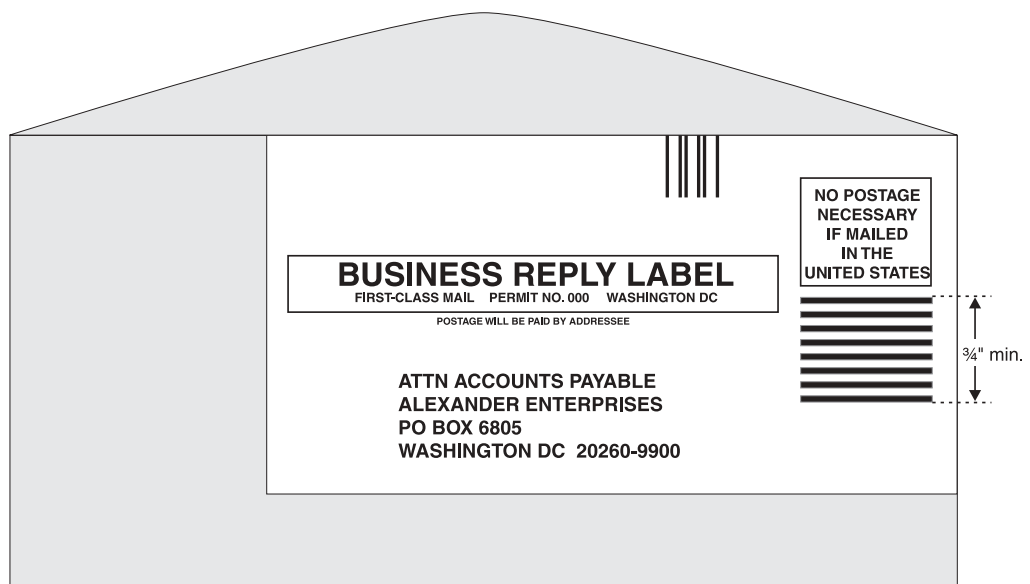
Follow these business reply label requirements:

- For use on letter-size envelopes, you must print labels that are at least 2-5/8 inches high and 4-1/4 inches long. You must print the appropriate FIM (FIM B or FIM C) on these labels.

- You must make sure that the series of horizontal bars is at least 3/4 inch high.

- You must use "BUSINESS REPLY LABEL" in the business reply legend.

- You must ensure that the address is located within the MLOCR read area (see Exhibit 3-1).

- You must coat the backs of the labels with a permanent adhesive.

- You must provide a pictorial diagram for the respondent that shows the correct placement of the label and that includes at least the instructions in Exhibit 6-18.

Exhibit 6-18
Business Reply Label Instructions to Customers

1. Place the label squarely on the upper right corner of the envelope.

2. Do not write on the envelope.

3. Do not use an envelope that has a window, an envelope that is less than 1 inch taller than the label, or an envelope that has any printing on it other than the return address.

4. Do not use the label on letter-size envelopes more than 4½ inches high.

5. Do not use tape to affix the label.

Priority Business Reply Mail

You may choose to have BRM pieces returned to you by using business reply service processed as Priority Mail. Priority Mail BRM is rated zone 4 if the zone cannot be determined from the cancellation or your complete delivery address on the BRM pieces.

In addition to meeting the BRM technical format requirements, your pieces must include the marking "PRIORITY" or "PRIORITY MAIL" placed prominently on the address side of each piece. This marking must not interfere with any required BRM endorsements. Priority BRM is not eligible for QBRM.

Paying for Replies

Choose from the following ways to pay for BRM replies:

- **Regular Per-Piece Fee—**In this option, the carrier delivers your BRM pieces and charges you First-Class Mail postage plus a BRM per-piece fee. You pay the carrier directly or through a regular postage due account. This method is recommended if you receive a small volume of BRM pieces.

- **Advance Deposit Account—**You can set up a BRM advance deposit account with the Postal Service and place money on deposit. Your per-piece BRM fee is lower than the regular per-piece fee. Your mail is processed in a postage-due unit that counts the number of pieces, calculates postage charges, and debits your postage account. A BRM advance deposit account requires a separate annual accounting fee.

- **QBRM—**This option is best if you receive a large volume of BRM letter-size pieces or want to benefit from the lowest BRM per-piece fee available. For details on QBRM, see the following section.

Participating in Qualified Business Reply Mail

Description

QBRM provides an automated method for sorting, counting, and rating BRM. The processing of your mail on automated equipment presents an excellent opportunity for increasing efficiency, improving service, and protecting postal revenues.

You must be assigned a unique add-on for each rate category of BRM authorized for QBRM (card rate, 1-ounce letter rate, and 2-ounce letter rate). A unique ZIP+4 code is assigned to your company or organization. The code represents the type of BRM piece and the corresponding BRM rate to be charged.

Procedures

You may obtain a reduced BRM fee by participating in QBRM. Participation requires preparing BRM pieces as described in DMM E150. If you want to participate in QBRM, you must do the following:

- Submit PS Form 6805, *Qualified Business Reply Mail (QBRM) Application and Approval,* to the postmaster or the manager of business mail entry at the post office to which the BRM pieces are to be returned.

- Produce sample BRM pieces using ZIP+4 barcodes and FIM positives provided by the Postal Service.

- Provide a preproduction sample of each BRM piece to the mailpiece design analyst for evaluation.

- Have a valid BRM permit.

- Pay the annual BRM permit and accounting fees.

- Obtain authorization to participate in QBRM.

- Follow all requirements in DMM E150.

Unique ZIP+4

You must have a unique four-digit add-on code specific to BRM and unique for each category of BRM pieces (such as postcard, 1-ounce letter, 2-ounce letter). Only letter-size BRM pieces that weigh 2 ounces or less are eligible for QBRM discounts.

Removal From Program

You may be removed from the QBRM program and required to pay the higher BRM per-piece fee for any of the following reasons:

- Your pieces fail to meet the readability specifications.

- Your unique BRM ZIP+4 code is used on a mailpiece other than the one to which it is assigned.

- Your ZIP+4 code intended for regular mail delivery is used on BRM pieces.

- The annual accounting and permit fees are not paid.

- Other BRM standards in the DMM are not met.

Additional Standards

Besides meeting the standard BRM format requirements, you must meet the following additional QBRM requirements:

- Prebarcode your QBRM pieces. You are assigned a unique ZIP+4 code and corresponding barcode that identify the customer and the category of mail.

- Use FIM C. A camera-ready positive is available at no charge from the Postal Service.

- Provide samples of your BRM pieces to a mailpiece design analyst early in the design process. To make sure that your pieces achieve the best quality, allow time for changes before printing.

Using International Business Reply Service

Description

International business reply service (IBRS) is similar to domestic business reply mail service. IBRS allows you to distribute envelopes and cards in certain foreign countries for return to you in the United States without prepaying postage.

With IBRS, you can extend your reach throughout the world, opening new markets or improving current markets. As with domestic business reply mail, you pay only for IBRS pieces mailed back to you by the respondents.

Be sure to take your IBRS samples to the post office for evaluation and approval. By using this service, you can save time and money. For complete information on designing and using IBRS, see Publication 513, *International Business Reply Service*, and the *International Mail Manual* (IMM), part 393.

Availability

International Business Reply Service (IBRS) is available to every country and territorial possession in the world that is a destination point for U.S.-originating international mail.

Dimensions

You must make sure that your IBRS pieces are within the dimensions shown in Exhibit 6-19.

Exhibit 6-19
IBRS Dimensions

Dimension	—Card—		—Letter—	
	Minimum	Maximum	Minimum	Maximum
Height	3-1/2"	4-1/4"	3-1/2"	6-1/8"
Length	5-1/2"	6"	5-1/2"	11-1/2"
Thickness	0.007"	0.016"	0.007"	0.200"

Weight

You must make sure that your IBRS piece weighs no more than 2 ounces.

Window Envelopes

If you use window envelopes, make sure that all windows are covered with a nontinted, transparent material. You may not use open (noncovered) windows for IBRS.

Design Format

You must meet the IBRS form requirements (listed below) and the QBRM requirements (including use of FIM C). Because of international agreements, IBRS pieces have a few unique design elements (see Exhibit 6-20). See the IMM for more information on how to use IBRS.

Exhibit 6-20
IBRS Design Format
(not drawn to scale)
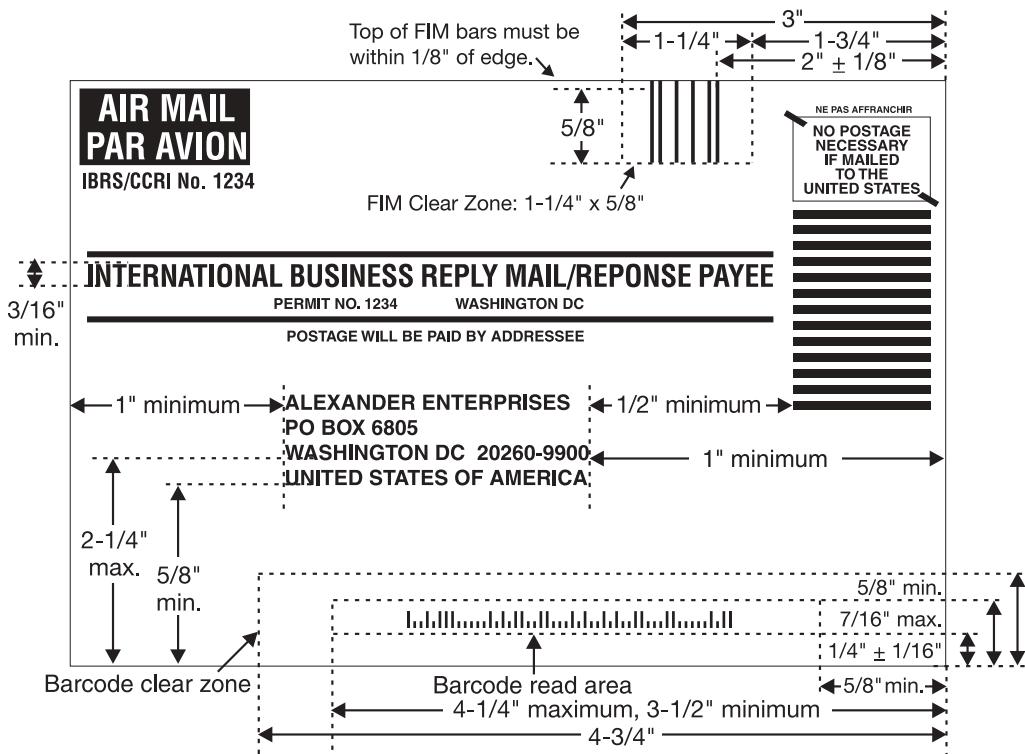
Postage Endorsement

You must place the postage endorsement "NE PAS AFFRANCHIR, NO POSTAGE NECESSARY IF MAILED TO THE UNITED STATES" in the upper right corner. You must print this endorsement with a partial diagonal bar (see Exhibit 6-21).

Exhibit 6-21
Postage Endorsement
(not drawn to scale)
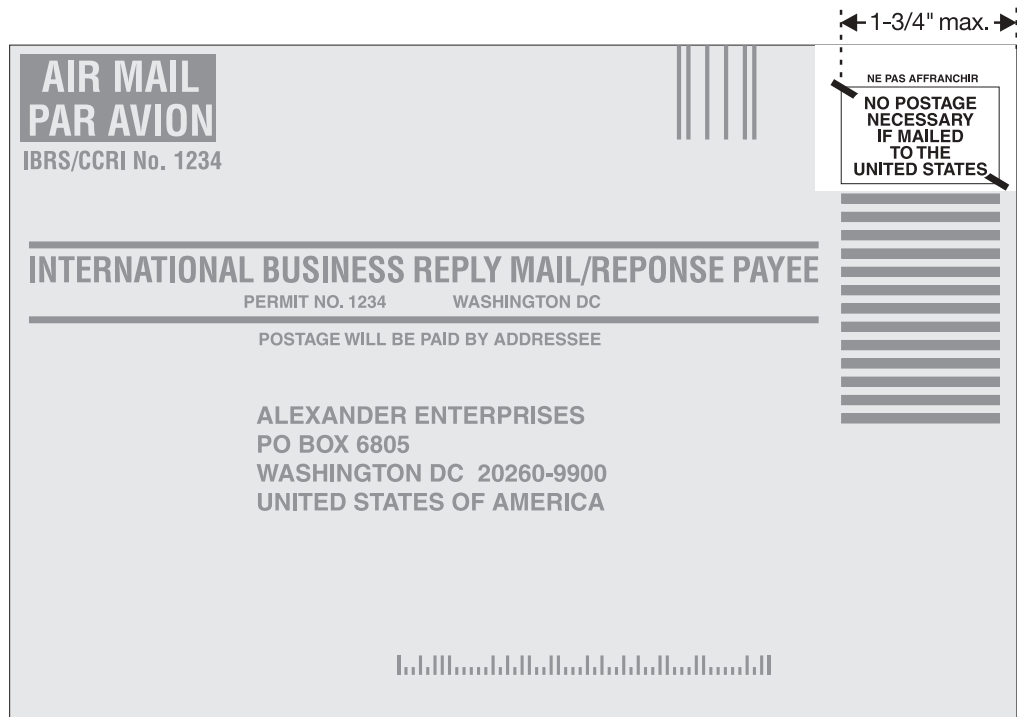
Horizontal Bars

You must print a series of horizontal bars parallel to the length of the IBRS piece directly under the postage endorsement. The bars must be of uniform length, at least 1 inch long, and 1/16 inch to 3/16 inch thick, evenly spaced.

The bars must not extend below the delivery address line (the line above the city, state, and ZIP+4 line). The left edge of the bars may be no more than 1-3/4 inches from the right edge of the IBRS piece (see Exhibit 6-22).

There also must be at least 1/2 inch of clearance between the ZIP+4 and the bars.

Exhibit 6-22
Horizontal Bars
(not drawn to scale)
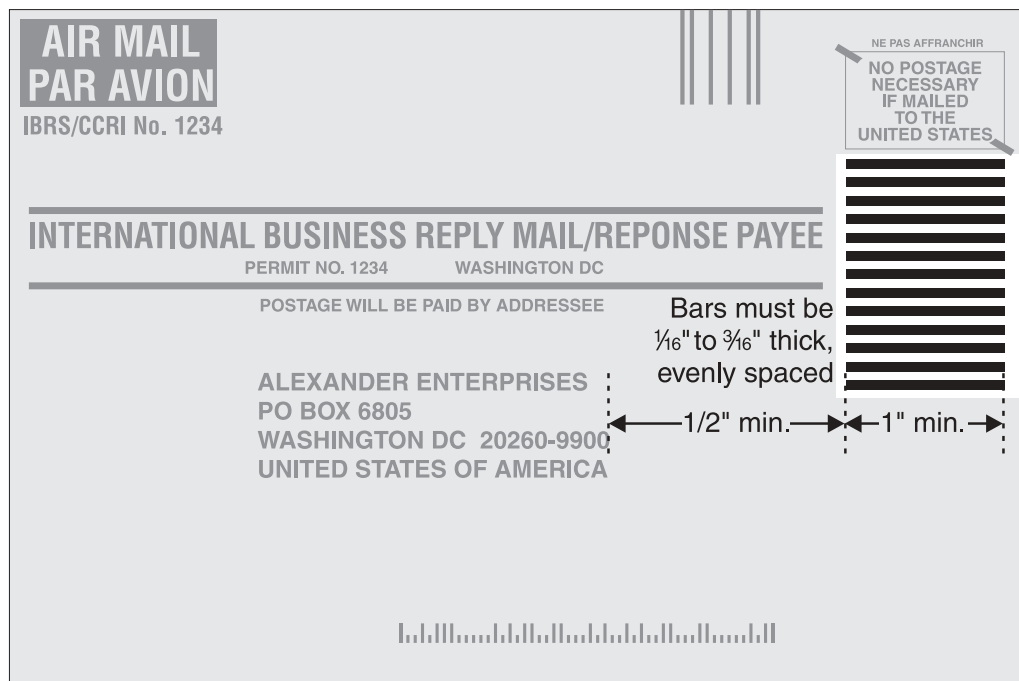
Legend, Number, and Endorsement

You must place, in capital letters, the business reply legend "INTERNATIONAL BUSINESS REPLY MAIL/REPONSE PAYEE" above the complete delivery address. The letters must be at least 3/16 inch high. Directly below, you must place in capital letters "PERMIT NO." followed by your permit number and the issuing post office name (city and state).

These two lines of information must appear between two horizontal bars at least 3/32 inch thick and at least 1/2 inch apart. You must place the postage endorsement "POSTAGE WILL BE PAID BY ADDRESSEE" immediately below the lower bar (see Exhibit 6-23).

Exhibit 6-23
Business Reply Legend
(not drawn to scale)
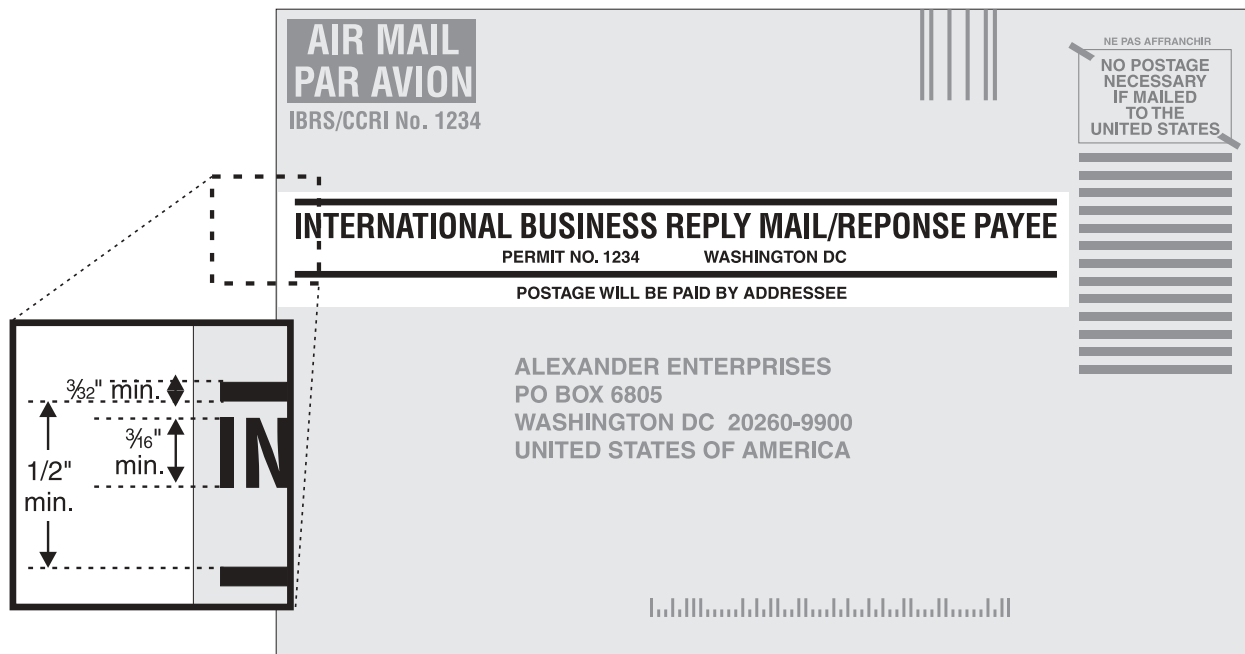
Complete Delivery Address

You must print a complete delivery address that includes the unique ZIP+4 code and "UNITED STATES OF AMERICA" (in capital letters) as the destination country (see Exhibit 6-24). The bottom line of the address must be no less than 5/8 inch from the bottom edge of your IBRS piece. The line for city, state, and ZIP+4 must be no more than 2-1/4 inches from the bottom edge of your IBRS piece (see Exhibit 6-24).

Clear side margins, free of any extraneous matter (except for the horizontal bars specified on the right) and at least 1 inch wide, are required between the left and right edges of the IBRS piece and the delivery address.

Exhibit 6-24
Complete Delivery Address
(not drawn to scale)

AIR MAIL
PAR AVION
IBRS/CCRI No. 1234

NE PAS AFFRANCHIR

NO POSTAGE
NECESSARY
IF MAILED
TO THE
UNITED STATES

INTERNATIONAL BUSINESS REPLY MAIL/REPONSE PAYEE
PERMIT NO. 1234   WASHINGTON DC

POSTAGE WILL BE PAID BY ADDRESSEE

← 1" minimum → ALEXANDER ENTERPRISES ← ½" minimum →
PO BOX 6805
WASHINGTON DC 20260-9900 ← 1" minimum →
UNITED STATES OF AMERICA

2¼"
max.   ⅝"
min.
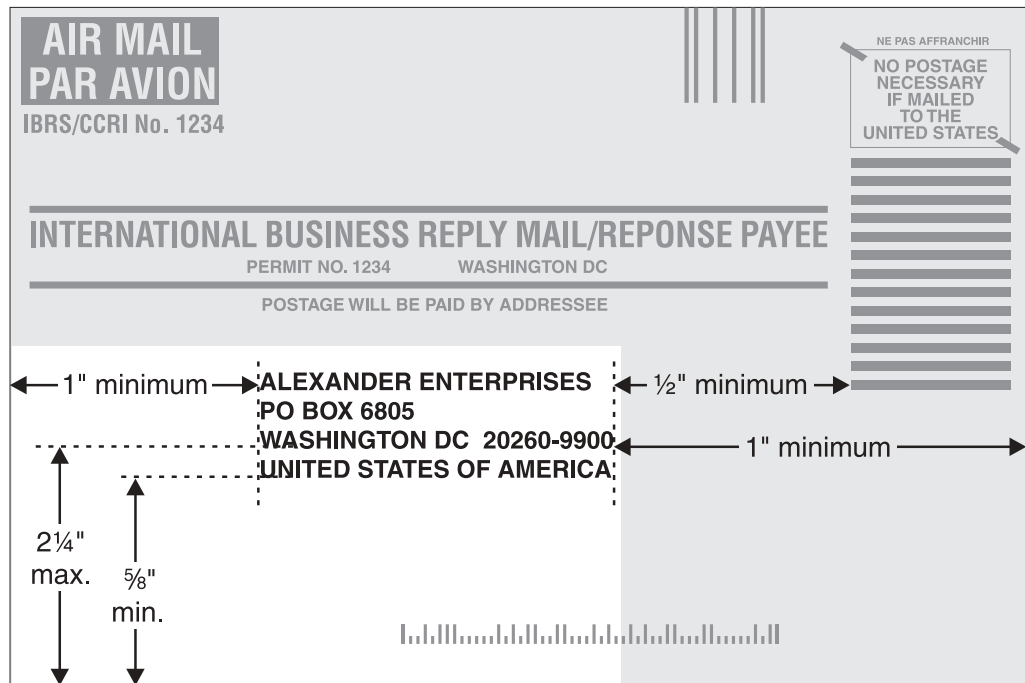
Air Mail Endorsement

You must show the endorsement "AIR MAIL/PAR AVION" (in reverse print) in the upper left corner (see Exhibit 6-25). Immediately below this endorsement, you must place "IBRS/CCRI No." and your permit number.

Exhibit 6-25
Air Mail Endorsement
(not drawn to scale)

AIR MAIL PAR AVION
IBRS/CCRI No. 1234

NE PAS AFFRANCHIR

NO POSTAGE
NECESSARY
IF MAILED
TO THE
UNITED STATES

INTERNATIONAL BUSINESS REPLY MAIL/REPONSE PAYEE

PERMIT NO. 1234   WASHINGTON DC

POSTAGE WILL BE PAID BY ADDRESSEE

ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-9900
UNITED STATES OF AMERICA

7 Courtesy Reply Mail

Receiving Customer Responses

Courtesy reply mail (CRM) is a good choice for responses that are fairly certain, such as payments for mailed invoices. With CRM, you (the sender) provide your customer (the respondent) with a preprinted return envelope or card without postage. The customer pays the return postage.

Compared with BRM, CRM has few design standards aside from barcodes and FIMs.

Making your CRM automation-compatible and using a FIM and barcode can lead to more efficient service through processing on automated equipment. For large billings, more efficient service means significant amounts of revenue received earlier. This revenue can increase your interest earned in the bank and improve your cash flow.

CRM pieces that are enclosed in automation rate mailings must meet the standards outlined in this chapter.

Following Design Formats

Basic Design

Make sure that the formats of your CRM envelopes and cards are correct before you print them. A Postal Service MDA can determine whether your CRM pieces meet the standards. Exhibit 7-1 shows the basic design of a CRM piece. Exhibits 7-2a, b, and c show sample envelopes.

Exhibit 7-1
CRM Design Format
(not drawn to scale)

Top of FIM bars must be within 1/8" of edge.

3"
1-1/4"
1-3/4"
2" ± 1/8"

5/8"

PLACE
STAMP
HERE

FIM Clear Zone: 1-1/4" x 5/8"

Address area

2-3/4"

1/2"

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805

1/2"

5/8"

Barcode clear zone

4-3/4"
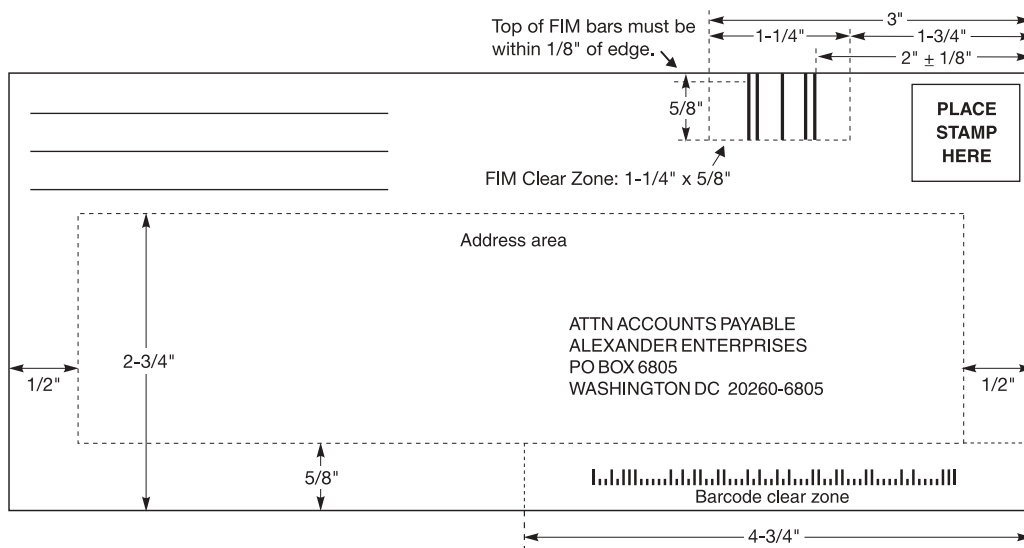
Exhibit 7-2a
CRM Envelopes
(not drawn to scale)

CRM Envelope with Barcode in Barcode Clear Zone

PLACE
STAMP
HERE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805
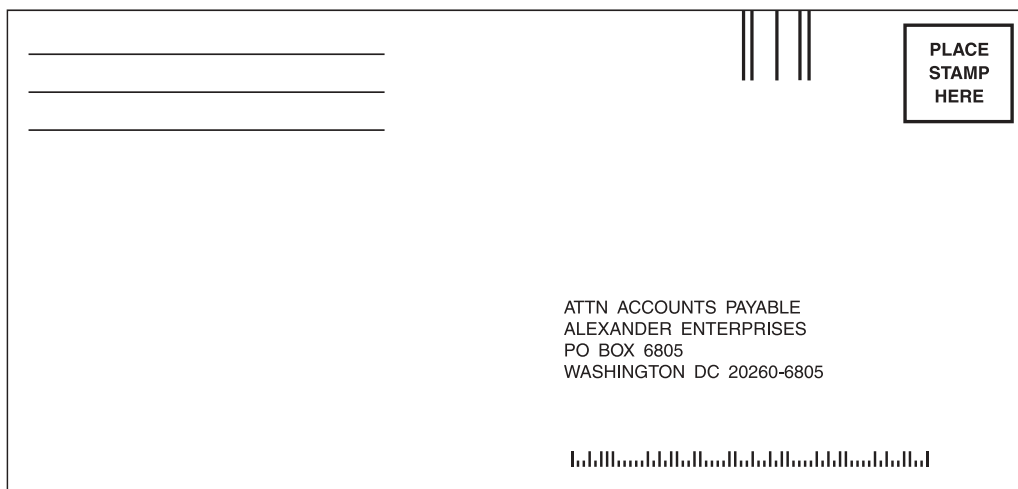
Exhibit 7-2b
CRM Envelopes
(not drawn to scale)

CRM Envelope with Barcode in Address Block

PLACE
STAMP
HERE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805
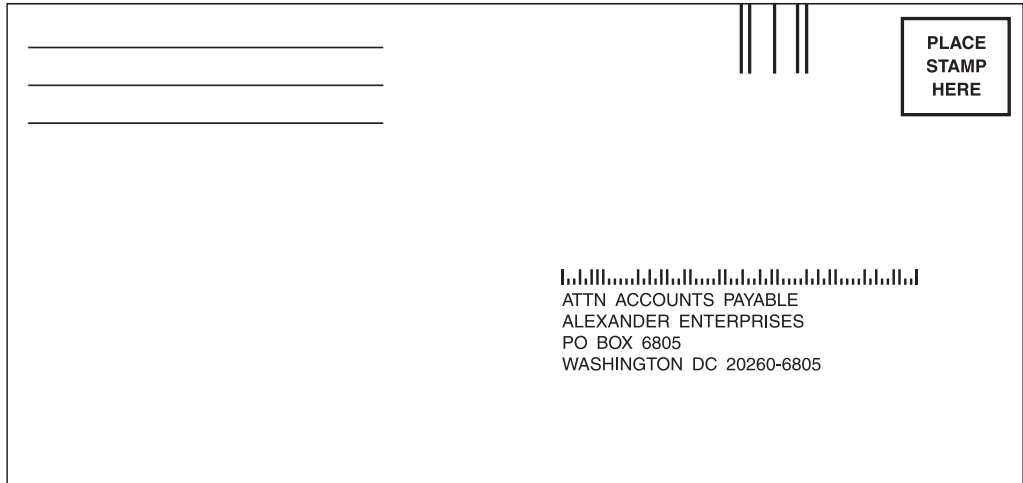
Exhibit 7-2c
CRM Envelopes
(not drawn to scale)

CRM Window Envelope with Barcode in Address Block

PLACE
STAMP
HERE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805
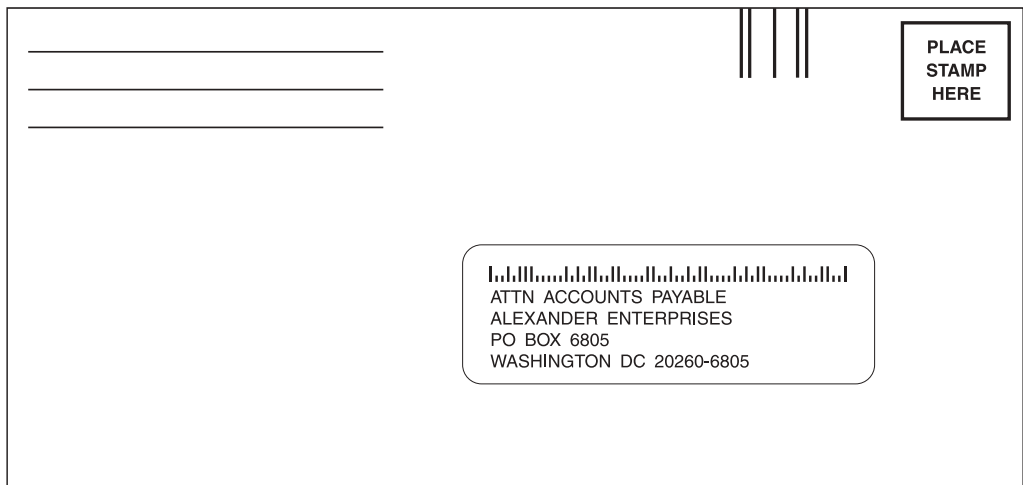
Dimensions

For your CRM pieces to be automation-compatible, make sure that they are within the dimensions shown in Exhibit 7-3.

Exhibit 7-3
Standard CRM Dimensions

| CRM | —Card— | | —Letter*— | |
Dimension	Minimum	Maximum	Minimum	Maximum
Height	3-1/2"	4-1/4"	3-1/2"	6-1/8"
Length	5"	6"	5"	11-1/2"
Thickness	0.007"	0.016"	0.007"	1/4"

* Letter mail may not be less than 0.009 inch thick if it is more than 4-1/4 inches high or more than 6 inches long or if the mail exceeds both those dimensions. (The length of a mailpiece is the dimension that parallels the lines of the delivery address. The top and bottom also parallel the delivery address lines.)

Nonmachinable Surcharge

Letter-rate First-Class Mail that weighs 1 ounce or less is nonmachinable and subject to the applicable surcharge if it has any of the criteria under "Nonmachinable Characteristics" beginning on page 12. Nonmachinable mailpieces are not automation-compatible.

Postage Reminder

You can include in the upper right corner of your CRM piece a reminder to affix postage (see Exhibit 7-4).

Exhibit 7-4
Postage Reminder
(not drawn to scale)

PLACE
STAMP
HERE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805

Facing Identification Mark

You must use FIM A with prebarcoded CRM to ensure efficient automated processing (see Exhibit 7-5). For FIM specifications, see Chapter 5.

Exhibit 7-5
FIM A Location
(not drawn to scale)
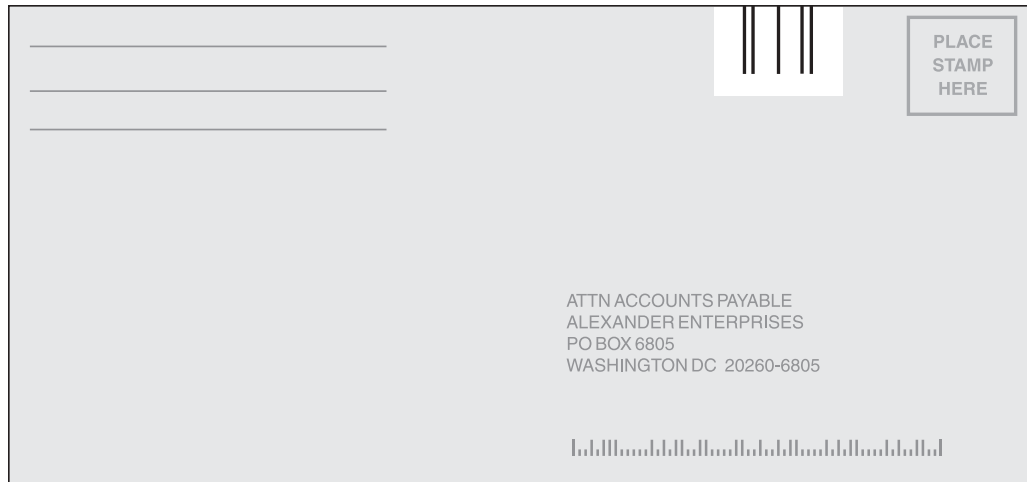
Return Address Lines

You can print a series of horizontal lines in the upper left corner for the sender's return address. The return address should be placed higher than 2-3/4 inches above the bottom edge of the CRM piece. It is recommended that the return address occupy an area no more than one-third the height and one-half the length of the CRM piece (see Exhibit 7-6).

Exhibit 7-6
Return Address Lines
(not drawn to scale)

At least 2-3/4"

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805

PLACE
STAMP
HERE
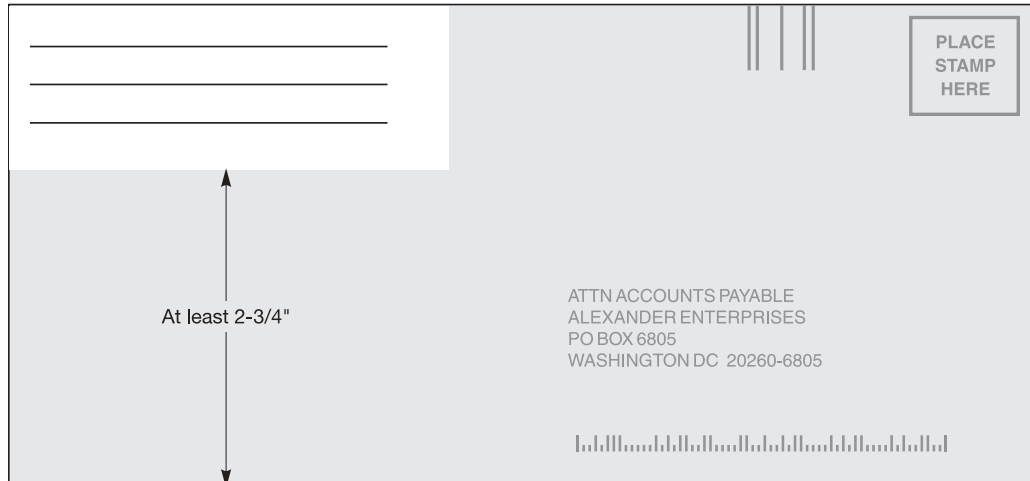
Delivery Address

The bottom line of your delivery address should be between 5/8 inch and 2-1/4 inches from the bottom edge of the CRM piece. A clear 1/2-inch margin is recommended on the left and right edges of the piece (see Exhibit 7-7).

Exhibit 7-7
Complete Delivery Address
(not drawn to scale)

PLACE
STAMP
HERE

1/2"

1/2"

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805

2-1/4" max.
5/8" min.
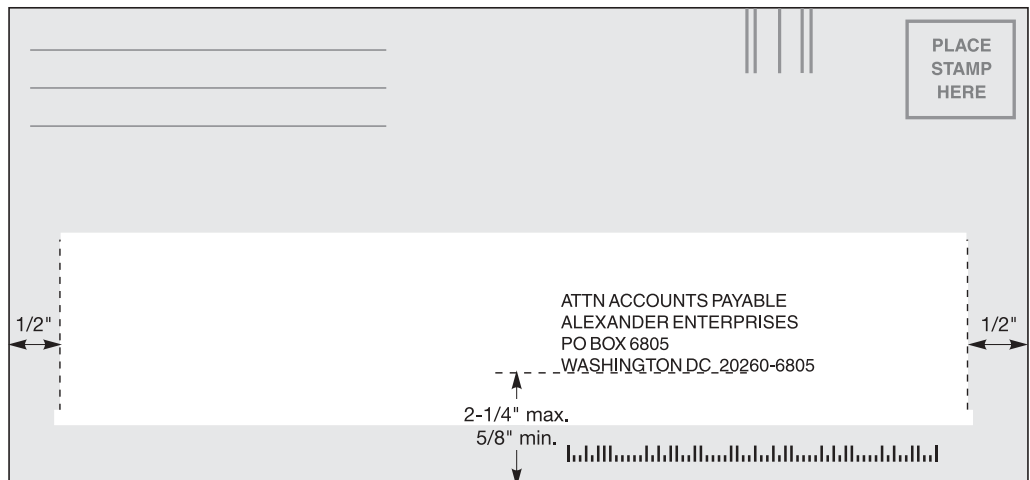
Barcodes

Barcodes may be placed either in the address block or in the barcode clear zone (see Chapter 4 on POSTNET barcodes). The correct barcode could be a delivery point barcode or a ZIP+4 barcode. Barcodes must meet all the standards outlined in Chapter 4. Contact your local post office for your applicable barcode.

Company Logo

If you include your company logo, be sure that the logo does not extend lower than ⅝ inch from the bottom edge (see Exhibit 7-8).

Exhibit 7-8
Company Logo
(not drawn to scale)

Logo must be at least ⅝ inch from bottom edge of mailpiece

PLACE STAMP HERE

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805
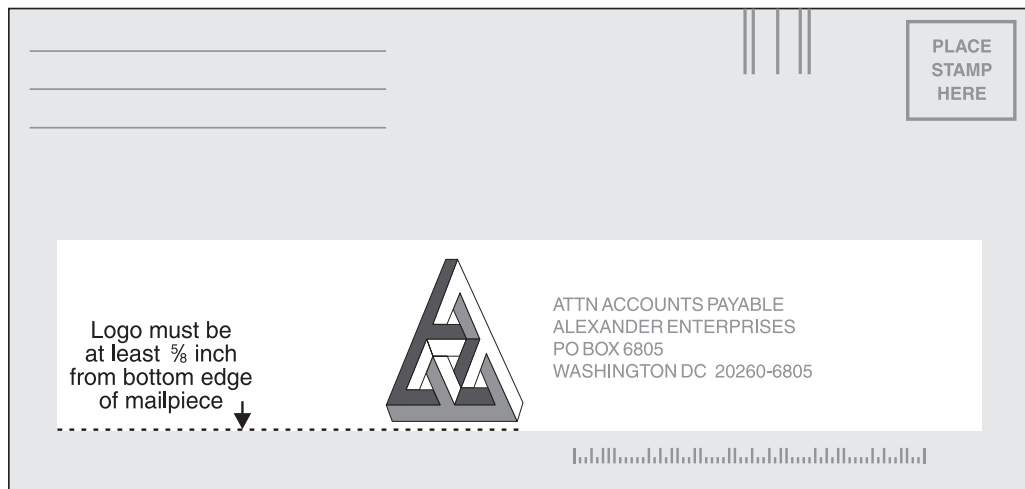
Printing Your Mail

Design Specifications

The design specifications for CRM are the same as those outlined in Chapter 2 for all other automation-compatible letter-size pieces.

Using Window Envelopes

Basic Design

Exhibit 7-2c shows the basic design of a CRM piece with a window envelope and insert. For successful automated processing, design window envelopes and inserts so that all four sides of the delivery address and barcode (when included) show in the window area by at least a 1/8-inch margin regardless of how much the insert shifts.

Meter Reply Mail

Meter stamps may be used to prepay postage on CRM postcards and envelopes. This is meter reply mail (MRM). Follow the same format standards as with CRM.

An additional format standard for MRM is its legend. The words "NO POSTAGE STAMP NECESSARY POSTAGE HAS BEEN PREPAID BY:" are printed above the delivery address (see Exhibit 7-9).

For more MRM standards, see Quick Service Guide 924 and DMM P030.

Exhibit 7-9
Meter Reply Mail
(not drawn to scale)

NO POSTAGE STAMP NECESSARY
POSTAGE HAS BEEN PREPAID BY:

ATTN ACCOUNTS PAYABLE
ALEXANDER ENTERPRISES
PO BOX 6805
WASHINGTON DC 20260-6805

A Ink/Paper Definitions

This appendix provides definitions and formulas for determining the reflectance of mailpiece backgrounds and printing ink, print contrast ratio (PCR), and print reflectance difference (PRD). Values for these parameters are always less than one. Decimal fractions (for example, 0.65) and percentages are generally used interchangeably, but this publication uses percentages. All parameters are measured as shown in Appendix B.

Reflectance

The symbol R is used for reflectance. Only diffuse (scattered) reflectance is of interest. It represents the percentage of incident light diffusely reflected by the material in question. A surface perfectly reflecting the incident light has a reflectance of 100 percent; a surface reflecting only half the incident light has a reflectance of 50 percent.

Print Reflectance Difference

$PRD = (R_w - R_p) \times 100$

R_w is the reflectance of the background
(e.g., envelope or card)
R_p is the reflectance of the ink
(e.g., character stroke)

Print Contrast Ratio

$$PCR = \frac{R_w - R_p}{R_w} \times 100$$

R_w and R_p are defined as above

B Ink/Paper Measurement

This appendix is for mailers who have instruments capable of measuring optical reflectance and contrast.

Instrument Calibration Standards

The measurements here apply only to diffuse reflectance. A perfectly reflecting, perfectly diffusing surface has a reflectance of 100 percent. This is the reference or basis for reflectance measurements. Calibrated pressed barium sulfate ($BaSO_4$) or magnesium oxide (MgO) is a suitable reference standard for instrument calibration to indicate 100 percent reflectance for a white surface.

Carbon black or other black backing such as black velvet that reflects less than 1 percent light may be used as a suitable reference standard for zero reflectance. Instruments should be calibrated according to the manufacturer's instructions using either the above primary standards or the secondary standards supplied with the measurement equipment.

Instrumentation

Measurements may be made using the Postal Service-approved envelope reflectance meter. If other instruments are used, they should provide the appropriate spectral response characteristics in the red and the green portions of the optical spectrum shown in the graph below and described on the next page.

Spectral Response Curves

Wavelengths in Nanometers
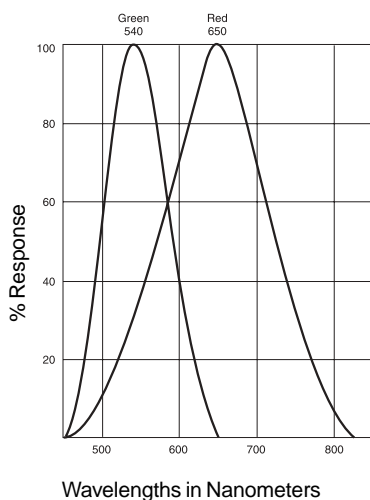
Area Resolution

For measurements associated with POSTNET barcode functions, the effective area measured by the Postal Service envelope reflectance meter (ERM-2) is 6 mils (0.006 inch) by 10 mils (0.010 inch).

Address Block Measurements

Reflectance and contrast measurements on POSTNET barcodes and potential interference should be made in the red and the green portions of the optical spectrum as follows:

1. Make sure that auto-calibration has been performed on the instrument and the mode switch is in the "Operate" position. (The display should read "00%00%00%.00 inches.")

2. Place the sample switch in the "Paper" position. Position the mailpiece in the mail slot of the instrument so that the paper background is centered within the reticle pattern on the view screen. Place the sample switch in the "Hold" position. The unit locks the last value displayed into its internal memory and uses this value for all future PRD and PCR calculations. This value is also locked into the display readout.

3. Place the sample switch in the "Ink" position and move the mailpiece in the mail slot so that a portion of the character is centered within the reticle pattern on the view screen. Place the sample switch in the "Hold" position. This value is locked into the unit's internal memory for all future PRD and PCR calculations. This value is also locked into the display readout.

4. With the sample switch in the "Hold" position, all reflectance parameters are held on the display. By toggling the channel switch, the operator can obtain the corresponding values for the red spectrum channel.

POSTNET Code and FIM Measurements

Reflectance and reflectance difference measurements on POSTNET and FIM bars, and on potential interference, should be made in the green and the red portions of the optical spectrum. The same procedures that apply to address block measurements apply to measuring POSTNET codes and FIMs.

C Glossary

Address Change Service (ACS)—An automated process that provides change-of-address information to participating mailers who maintain computerized mailing lists. The information is captured in the Computerized Forwarding System (CFS) units and sent to mailers on electronic media which reduces the volume of manual change-of-address notices.

Address Element Correction (AEC)—A process that identifies and revises incomplete or incorrect addresses and then attaches ZIP+4 and carrier route codes. It involves matching of records that cannot be coded using CASS-certified address matching software.

ancillary service—Forwarding, return, or address correction service included within a mail class. Depending on the mail class, these services are performed at a charge or at no additional charge, if and when the service is actually rendered.

ancillary service endorsement—A marking used by a mailer to request the new address of an addressee and to provide the USPS with instructions on how to handle mail that is undeliverable as addressed.

aspect ratio—The dimension of a mailpiece expressed as a ratio of height to length.

automation discount—A postage reduction offered to mailers who prebarcode their mailpieces and meet addressing, readability, and other requirements for processing on automated equipment.

barcode—A series of vertical full bars and half bars representing ZIP Code information relative to the address on the mailpiece.

barcode read area—The clear zone on the lower right corner of a letter-size mailpiece that must be kept free of printing and symbols except for the barcode itself.

barcode reader—A component of a barcode sorter that reads and interprets the barcode previously applied to a mailpiece.

barcode sorter (BCS)—A computer-controlled machine that sorts letters, based on an imprinted barcode on the letters, at speeds of 32,000 pieces an hour.

basis weight—The weight in pounds of a ream (500 sheets) of paper cut to a specified standard size for that grade.

business reply mail (BRM)—Specially printed cards, envelopes, cartons, and labels that may be mailed without prepayment of postage. The postage and fees are collected when the mail is delivered back to the sender. This service enables mailers to receive First-Class Mail, without postage, back from customers by paying the postage and fees on receipt of the mailpieces.

courtesy reply mail (CRM)—A preprinted return envelope or card provided as a courtesy to customers. Customers responding to the original mailing pay the return postage.

delivery barcode sorter (DBCS)—A small, multilevel, high-speed barcode sorter that finalizes letter mail sortation to the carrier sector/segment level using a two-pass operation to sort up to 40,000 pieces an hour.

delivery point barcode (DPBC)—A ZIP+4 barcode containing two additional digits (represented by 10 additional bars) that designate a specific delivery point.

***Domestic Mail Manual* (DMM)—**The Postal Service manual that contains the basic standards governing domestic mail services; descriptions of the mail classes and services and conditions governing their uses; and standards for rate eligibility and mail preparation. Domestic mail is classified by size, weight, content, service, and other factors.

em space—A unit of measure exactly as wide as the point size of the type being set. In 12-point type, the em space is 12 points wide.

em height—A unit of measure exactly as high as the point size of the type being set. In 12-point type, the em height is 12 points high.

facing identification mark (FIM)—A pattern of vertical bars printed in the upper right portion of the mailpiece just to the left of the postage indicia, used to identify business reply mail and certain other barcoded mail. The FIM is an orientation mark for automated facing and canceling equipment.

***FASTforward^{SM}*—**A USPS-licensed automated system that updates addresses by identifying names and addresses for which current change-of-address orders are on file. A piece updated with *FASTforward* can be delivered directly to the new address rather than forwarded from the old address. *FASTforward* systems interface with USPS-approved automation systems such as multiline optical character readers (MLOCRs) and remote video encoding (RVE) operations.

First-Class Mail—A class of mail that includes all matter wholly or partly in writing or typewriting, all actual and personal correspondence, all bills and statements of account, and all matter sealed or otherwise closed against postal inspection. First-Class Mail comprises three subclasses: postcards, letters and sealed parcels, and Priority Mail. Any mailable matter may be sent as First-Class Mail. First-Class Mail is a USPS trademark.

font—A complete assortment of letters, numbers, punctuation marks, etc., of a specific size and type style.

franked mail—The official mail sent without prepayment of postage by members and members-elect of Congress, the Vice President, and other authorized individuals. Mail must relate to the office business, activities, and duties of Congress. The envelope or wrapper bears a written signature, printed facsimile signature, or other required marking instead of a postage stamp.

halftone—The reproduction of continuous-tone artwork, such as a photograph, through a crossline or contact screen, which converts the image into dots of various sizes for printing.

horizontal bars—A series of uniform wide bars, parallel to the length of the mailpiece, printed immediately below the "NO POSTAGE NECESSARY" endorsement on business reply mail.

indicia—The imprinted designations used on mailpieces denoting method of postage payment (e.g., permit imprint).

insert—A letter or other item placed in an envelope for mailing.

International Business Reply Service (IBRS)—In international mail, a service that allows envelopes and postcards to be distributed in certain foreign countries for return without postage prepayment to the original sender in the United States.

***International Mail Manual* (IMM)—**The Postal Service manual containing most regulations for international mail services.

kerning—Reducing space between characters. Negative letter spacing.

keyline—Optional mailer information printed at least two lines above the address or in the lower left corner of the envelope. Under some postage payment systems, the keyline is a required line that contains specific information about the mailpiece.

metered mail—Any mail class (except Periodicals) with postage printed by a USPS-approved postage meter.

metered reply mail (MRM)—A preprinted return envelope or card provided as a courtesy to customers. The postage is prepaid by the meter license holder as a courtesy to the respondent.

mil—A unit of measure equal to 0.001 inch.

multiline optical character reader (MLOCR)—A machine that scans ("reads") an entire address block on mail, translates the address into a corresponding barcode, sprays the barcode onto the mail, then sorts the mail to an appropriate stacker with a throughput of 30,000 to 37,000 pieces an hour, depending on the type of mail.

nanometer (nm)—A unit of wavelength (when applied to light) of 10^{-9} meters (1 billionth of a meter).

National Change of Address (NCOA)—An address correction service that the Postal Service provides to mailers through licensees. The licensees match mailing lists submitted to them on tape or disk against change-of-address information for the entire country from all Computerized Forwarding System units. If a match is made, NCOA can correct the address before it is used on a piece of mail.

optional endorsement line (OEL)—A series of specific printed characters on the top line of the address block that identifies the sortation level of a package or bundle and may contain an ACS participant code. The OEL is used in place of package labels.

permit—Any authorization required for specific types of preparation or postage payment. For example, an authorization to mail without postage affixed by using permit imprint indicia.

permit imprint—Printed indicia, instead of an adhesive postage stamp or meter stamp, that shows postage prepayment by an authorized mailer.

pitch—The center-to-center spacing between two adjacent objects such as characters in a line of characters, bars in a barcode, or lines in an address block.

point—A typographical unit of measure equal to approximately $1/72$" (0.0138").

POSTNET—(<u>POST</u>al <u>N</u>umeric <u>E</u>ncoding <u>T</u>echnique) The barcode used to encode ZIP Code information on letter and flat mail.

print contrast ratio (PCR)—The contrast between the ink used in the address and the background of the mailpiece. Expressed as a percentage, PCR is the reflectance of the background minus the reflectance of the ink divided by the reflectance of the background multiplied by 100.

print reflectance difference (PRD)—The background reflectance minus print reflectance, expressed as a percentage.

proportional spacing—The spacing of characters in a line so that the space occupied by a character is proportional to the width of that character, as opposed to fixed spacing in which every character occupies the same amount of space regardless of its actual width.

Qualified Business Reply Mail (QBRM)—An automated method for sorting, counting, and rating business reply mail (BRM) for authorized mailers.

rates and classification service center (RCSC)—A field office of headquarters that provides guidance to field personnel and customers on mail classification, postage rates, mail preparation, and postage payment programs.

remote encoding center—A Postal Service unit that uses advanced technology to assign barcodes to hand-addressed mailpieces physically located at a general mail facility. After the mailpiece image is displayed on a computer terminal, an operator, who is at the center, keys in the ZIP Code and the street address in order to match this information with that in a database. This allows for the imprinting of the barcode and automated mail processing at the general mail facility.

serif—The short crosslines at the ends of the main strokes of letters in certain type styles.

skew—The misalignment or slant of a character, bar, line of characters, or barcode with respect to the bottom or top edge of the mailpiece.

Standard Mail—A class of mail consisting of mailable matter that is not required to be mailed as First-Class Mail or is not mailed as Periodicals, and that weighs less than 16 ounces. It comprises the subclasses of Regular Standard Mail, Nonprofit Standard Mail, Enhanced Carrier Route Standard Mail, and Nonprofit Enhanced Carrier Route Standard Mail. These subclasses include circulars, printed matter, pamphlets, catalogs, newsletters, direct mail, and merchandise. Standard Mail may be sent at presorted rates and at automation rates.

stroke—The line or lines forming a character such as the stem or the top of a "T."

unique five-digit ZIP Code—A five-digit ZIP Code assigned to a company, government agency, or entity with sufficient mail volume, based on average daily volume of letter-size mail received, availability of ZIP Code numbers in the postal area, and USPS cost-benefit analyses.

ZIP+4—A nine-digit numeric code incorporating the original five-digit ZIP Code, a hyphen, and four additional digits. The first five digits identify the delivery office. The four-digit add-on identifies a specific delivery segment such as a city block face, a floor of a building, a department within a firm, range of rural route box numbers, or a group of post office boxes.

ZIP (Zone Improvement Plan) Code—Established in 1963, the system of 5-digit codes that identifies the individual post office or metropolitan area delivery station associated with an address.

D Decimal Equivalents

Eighths (1/8ths)
$\frac{1}{8}$ =   0.125
$\frac{2}{8}$ ($\frac{1}{4}$)   =   0.250
$\frac{3}{8}$ =   0.375
$\frac{4}{8}$ ($\frac{1}{2}$)   =   0.500
$\frac{5}{8}$ =   0.625
$\frac{6}{8}$ ($\frac{3}{4}$)   =   0.750
$\frac{7}{8}$ =   0.875

Sixteenths (1/16ths)
$\frac{1}{16}$ =   0.0625
$\frac{3}{16}$ =   0.1875
$\frac{5}{16}$ =   0.3125
$\frac{7}{16}$ =   0.4375
$\frac{9}{16}$ =   0.5625
$\frac{11}{16}$ =   0.6875
$\frac{13}{16}$ =   0.8125
$\frac{15}{16}$ =   0.9375

Twenty-Fifths (1/25ths)
$\frac{1}{25}$ =   0.040
$\frac{2}{25}$ =   0.080
$\frac{3}{25}$ =   0.120
$\frac{4}{25}$ =   0.160
$\frac{5}{25}$ =   0.200
$\frac{6}{25}$ =   0.240
$\frac{7}{25}$ =   0.280
$\frac{8}{25}$ =   0.320
$\frac{9}{25}$ =   0.360
$\frac{10}{25}$ =   0.400
$\frac{11}{25}$ =   0.440
$\frac{12}{25}$ =   0.480
$\frac{13}{25}$ =   0.520
$\frac{14}{25}$ =   0.560
$\frac{15}{25}$ =   0.600
$\frac{16}{25}$ =   0.640
$\frac{17}{25}$ =   0.680
$\frac{18}{25}$ =   0.720
$\frac{19}{25}$ =   0.760
$\frac{20}{25}$ =   0.800
$\frac{21}{25}$ =   0.840
$\frac{22}{25}$ =   0.880
$\frac{23}{25}$ =   0.920
$\frac{24}{25}$ =   0.960

Thirty-Seconds (1/32ths)
$\frac{1}{32}$ =   0.03125
$\frac{3}{32}$ =   0.09375
$\frac{5}{32}$ =   0.15625
$\frac{7}{32}$ =   0.21875
$\frac{9}{32}$ =   0.28125
$\frac{11}{32}$ =   0.34375
$\frac{13}{32}$ =   0.40625
$\frac{15}{32}$ =   0.46875
$\frac{17}{32}$ =   0.53125
$\frac{19}{32}$ =   0.59375
$\frac{21}{32}$ =   0.65625
$\frac{23}{32}$ =   0.71875
$\frac{25}{32}$ =   0.78125
$\frac{27}{32}$ =   0.84375
$\frac{29}{32}$ =   0.90625
$\frac{31}{32}$ =   0.96875

E Getting More Information

Introduction

This appendix tells you where to go for more information on using letter mail. These sources can give you valuable tips and "tricks of the trade." As always, if you don't see what you need here, contact your local post office.

Non-Postal Service Sources

Some mail-related services are handled by private companies rather than by the Postal Service. Several are listed below.

Postage Meters

To lease a postage meter, look under "Mailing Equipment" in your local telephone directory.

Presort Service Bureaus

To find a presort service bureau, look under "Mailing Services" in your local telephone directory.

Mailing Lists

To buy a mailing list, look under "Mailing Lists" in your local telephone directory.

Postal Groups, Activities, and People

Mailpiece Quality Control Program

The Mailpiece Quality Control (MQC) program is a course designed to assist individuals or groups who are responsible for creating pieces that are mailed in large numbers. This program helps graphic artists, administrators, sales representatives—anyone involved in preparing large mailings—to accomplish their jobs with proficiency and confidence.

After you complete the course, you will better understand the mailpiece acceptance standards of the U.S. Postal Service for all classes of mail and processing categories. You will have enough understanding of the presorted mailing process to be able to analyze discount and payment options. You will also know how to consult reference materials to help make your job easier.

Poor mailpiece design can cause delays in the processing and delivery of your mail. MQC is a systematic way to ensure that designs from your organization are acceptable for mailing and are eligible for worksharing discounts from the Postal Service.

Good designs give you the confidence that your time and effort will pay off in postal "worksharing" discounts and successful processing of your mail. This course, which deals exclusively with domestic mail, can be downloaded from the Postal Explorer web site at http://pe.usps.gov.

National Postal Forum

The Postal Forum is an educational and trade show event for the mailing industry that is held bi-annually at different locations throughout the nation. For more information, visit their web site at http://www.npf.org.

Postal Customer Councils

Most areas have a local postal customer council (PCC), which can give you tips from experienced mailers who have successfully developed bulk mailing programs. PCCs also have general meetings to discuss Postal Service issues.

Postal Service Seminars

The Postal Service offers seminars on direct mail at selected sites around the country. Your local postal business center can tell you when seminars are offered in your area.

Postal Service Specialists

Postmasters
Although your local postmaster should be able to help you with many basic questions about preparing your presorted standard mailing, there are other postal specialists to help you with more complex technical issues.

Business Mail Entry Managers
Business mail entry managers are located in Customer Services Districts and are supported by rates and classification service centers. These managers are experts on the regulations described in the DMM and can give you advice if you want to try something new.

Account Representatives
Although account representatives are normally assigned to large business mailers, they can help you make sure that your mail gets the best possible service. Contact your local Customer Services District if you would like an account representative to help you.

Postal Publications

Most of the following postal publications are available from your local post office. Refer to the publication number in parentheses when you order or request them.

Publications

Domestic Mail

Domestic Mail Manual (DMM)—The Postal Service manual that contains the basic standards governing domestic mail services, descriptions of mail classes, the conditions governing their use, rates, and mailing standards. Issued once a year in printed form and available by paid subscription from the Superintendent of Documents (202-512-1800). Available at no charge on Postal Explorer at http://pe.usps.gov.
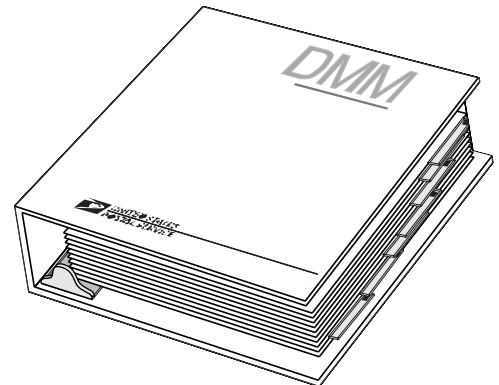
Rates

Ratefold (Notice 123)—A 10-panel foldout that contains all domestic rates and fees in a concise and accessible manner.
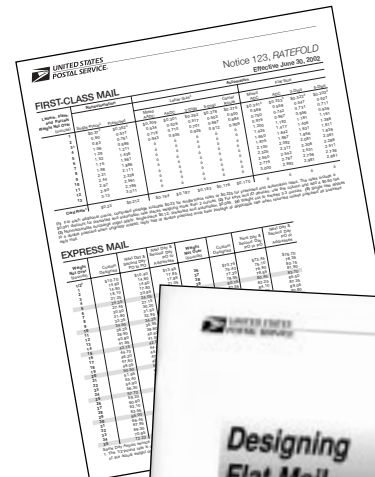
Flats Mail

Designing Flat Mail (Publication 63)—A guide to designing flat-size mail to work with flat-sorting machines and qualify for postage discounts.

Available on USPS web site
http://www.usps.com

Available on Postal Explorer CD-ROM and web site http://pe.usps.gov

Quick Service Guide

Quick Service Guide (Publication 95)—A collection of simplified instructions for most classes of mail, based on the Quick Service Guides in the DMM.

Addressing

Postal Addressing Standards (Publication 28)—Describes addressing for the best service.

Addressing for Success (Publication 221)—Addressing for compatibility with automated processing equipment.

Address Information Systems Products and Services (Publication 40)—A guide to products for improving the quality of address files.

ZIP Codes

National Five-Digit ZIP Code and Post Office Directory (Publication 65)—Lists ZIP Codes for every mailing address in the United States.
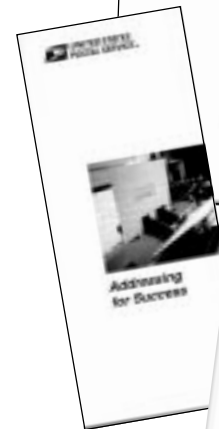
Training Program

Mailpiece Quality Control (MQC) *Training Program*—A self-study course to aid in designing mailpieces with an emphasis on automated mail processing. Includes workbook, video, DMM, and reference materials. Required for Systems Certification participants, but recommended for all mailers. This program is now available on Postal Explorer (http://pe.usps.gov). From the home page, select "Mailpiece Design" in the left frame.

Newsletters

Mailers Companion—Available on a free subscription basis. Issued monthly. Covers changes in regulations and new services, mostly in the form of highlights and interpretations. Subscribe by email to mncsc@email.usps.gov.

Postal Bulletin—Available on a paid subscription basis. Issued biweekly with supplementary issues. Covers changes in regulations and new services, often reprinting revisions in full.
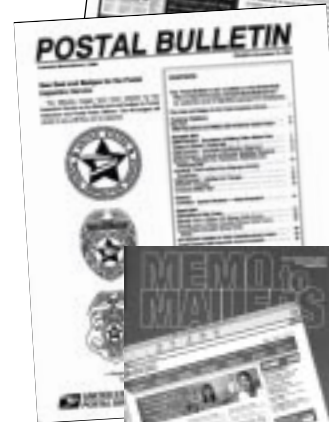
Memo to Mailers—Available on a free subscription basis. Issued monthly. Articles on postal topics. Subscribe by email to mmailers@email.usps.gov.

Available on USPS web site
http://www.usps.com

Available on Postal Explorer CD-ROM and web site http://pe.usps.gov

Addressing Software

For information on addressing software, contact the Memphis National Customer Support Center at 1-800-238-3150, your local computer software store, or your postal business center.

Trade Associations

Direct mail trade associations are excellent sources of information and assistance. These include:

DIRECT MARKETING ASSOCIATION
1120 AVENUE OF THE AMERICAS
NEW YORK NY 10036-6700
(212) 768-7277 / http://www.the-dma.org

POST COM
1901 N FORT MYER DR STE 401
ARLINGTON VA 22209-1609
(703) 524-0096 / http://postcom.org

NATIONAL MAIL ORDER ASSOCIATION
2807 POLK ST NE
MINNEAPOLIS MN 55418-2954
(612) 788-1673 / http://www.nmoa.org

MAIL ADVERTISING SERVICE ASSOCIATION INTL
1421 PRINCE ST
ALEXANDRIA VA 22314-2814
(703) 836-9200 / http://www.masa.org

ALLIANCE OF INDEPENDENT STORE OWNERS AND PROFESSIONALS
MULTIFOODS TOWER
33 S 6TH ST STE 3725
MINNEAPOLIS MN 55402-3719
(612) 340-9350

Other References

Mailing Regulations

You can order copies of the two Postal Service manuals containing regulations for domestic and international mail—the *Domestic Mail Manual* and the *International Mail Manual*—from the U.S. Government Printing Office by writing to the following address for subscription prices:

MAIL STOP SSOM
SUPERINTENDENT OF DOCUMENTS
US GOVERNMENT PRINTING OFFICE
732 N CAPITOL ST NW
WASHINGTON DC 20402-9375

Telephone: (202) 512-1800

Fax: (202) 512-2250 / http://www.access.gpo.gov/su_docs/

F Checklists

Business Reply Mail

1. **"Business Reply Mail" Legend**
   - ❏ All letters are capitals.
   - ❏ Letters are at least $\frac{3}{16}$ inch high.
   - ❏ Legend is properly worded.
2. **"First-Class Mail Permit No. ### City/ State"**
   - ❏ Endorsement is properly worded.
   - ❏ Permit number is correct.
   - ❏ City and state are correct.
3. **"Postage Will Be Paid by Addressee"**
   - ❏ Endorsement is properly worded.
   - ❏ Endorsement is properly positioned.
   - ❏ For official mail only, name of authorized federal agency is included.
4. **Delivery Address Block**
   - ❏ Delivery address line (street address/ PO box number) is directly above city/ state/ZIP+4 line.
   - ❏ ZIP+4 code corresponds with ZIP+4 barcode.
   - ❏ No extraneous printing is below "postage will be paid by addressee" line.
   - ❏ City/state/ZIP+4 line is at least $\frac{5}{8}$ inch from bottom edge.
   - ❏ City/state/ZIP+4 line is no higher than $2\frac{1}{4}$ inches from bottom edge.
   - ❏ If ZIP+4 barcoded, logo is at least $\frac{5}{8}$ inch from bottom edge. If not ZIP+4 barcoded, logo is no lower than delivery address line.
   - ❏ For window envelopes only: minimum clearances between address block (including barcode) and window edges are maintained on all sides during "insert shift."
5. **ZIP+4 Barcode and Lower Right Barcode Clear Zone**
   - ❏ Barcode is correctly positioned.
   - ❏ Barcode is readable.
   - ❏ ZIP+4 code/barcode is correct for rate category (QBRM).
   - ❏ Print reflectance minimum is met.
   - ❏ No extraneous printing or other matter is in the barcode clear zone.

6. **Facing Identification Mark (FIM)**
   - ❏ For nonbarcoded, FIM B is used. For ZIP+4 barcoded, FIM C is used.
   - ❏ FIM is properly positioned.
   - ❏ Top of FIM bars is no lower than $\frac{1}{8}$ inch and bottom of bars is no lower than $\frac{5}{8}$ inch from the top edge of the piece.
   - ❏ Print reflectance minimum is met.
   - ❏ No extraneous printing is in the FIM clear zone.
7. **"No Postage Necessary If Mailed in the United States"**
   - ❏ Endorsement is properly worded.
   - ❏ Endorsement is properly positioned.
   - ❏ Endorsement extends no more than $1\frac{3}{4}$ inches from right edge of piece.
8. **Horizontal Bars**
   - ❏ If ZIP+4 barcoded, bars are no lower than $\frac{5}{8}$ inch from bottom edge. If not ZIP+4 barcoded, bars are no lower than delivery address line.
   - ❏ Bars are properly spaced.
   - ❏ Bars are uniform in thickness and length.
9. **Other**
   - ❏ Aspect ratio is met (required for QBRM, encouraged for all others).
   - ❏ Dimensions are within letter-size standards and piece is automation-compatible.
   - ❏ Piece is at least $3\frac{1}{2}$ inches high.
   - ❏ Piece is at least 5 inches long.
   - ❏ If no larger than $4\frac{1}{4}$ inches by 6 inches, piece is at least 0.007 inch thick, and at least 0.009 inch thick if piece is larger than $4\frac{1}{4}$ inches by 6 inches.
   - ❏ For self-mailers and reusable pieces: piece contains instructions to user.
   - ❏ For official mail: endorsed "Official Business, Penalty for Private Use $300" in upper left area.

Courtesy Reply Mail

1. **Facing Identification Mark (FIM)**
   - ❏ FIM A is used.
   - ❏ FIM is properly positioned.
   - ❏ Minimum PRD is met.
   - ❏ No extraneous printing is in the FIM clear zone.

2. **Postage Area: Customer Reminder to Affix Postage (optional element)**
   - ❏ Area extends no more than 1¾ inches from right edge of the piece.

3. **Delivery Address Block**
   - ❏ Delivery address line (street address/ PO box number) is directly above city/ state/ZIP+4 line.
   - ❏ ZIP+4 code corresponds with ZIP+4 barcode.
   - ❏ City/state/ZIP+4 line is at least ⅝ inch from bottom edge of piece.
   - ❏ City/state/ZIP+4 line is no higher than 2¼ inches from bottom edge.
   - ❏ For window envelopes only: minimum clearances between address block (including barcode) and window edges are maintained on all sides during "insert shift."

4. **Barcode**
   - ❏ Barcode is correctly positioned (in address block or in barcode clear zone).
   - ❏ Barcode is readable.
   - ❏ Print reflectance minimum is met.
   - ❏ If barcoded in the barcode clear zone: there is no extraneous printing or other matter in the zone.

5. **Other**
   - ❏ Aspect ratio is met.
   - ❏ Dimensions are within the letter-size standards and the piece is automation-compatible.
   - ❏ Piece is at least 3½ inches high.
   - ❏ Piece is at least 5 inches long.
   - ❏ If no larger than 4¼ inches by 6 inches, piece is at least 0.007 inch thick, and at least 0.009 inch thick if piece is larger than 4¼ inches by 6 inches.
   - ❏ For official mail only: endorsed "Official Business, Penalty for Private Use $300" in upper left area.

Meter Reply Mail

1. **Facing Identification Mark (FIM)**
   - ❏ FIM A is used.
   - ❏ FIM is properly positioned.
   - ❏ Minimum PRD is met.
   - ❏ No extraneous printing is in the FIM clear zone.

2. **Meter Stamp**
   - ❏ Stamp is properly positioned.
   - ❏ Stamp contains no date.
   - ❏ Stamp is legible.
   - ❏ Postage is sufficient for type and weight of piece (for example, 1 ounce or 2 ounce).

3. **"No Postage Stamp Necessary Postage Has Been Prepaid By"**
   - ❏ Letters are all capitals.
   - ❏ Letters are at least $\frac{3}{16}$ inch high.
   - ❏ Endorsement is properly worded.

4. **Delivery Address Block**
   - ❏ Delivery address line (street address/ PO box number) is directly above city/ state/ZIP+4 line.
   - ❏ ZIP+4 code corresponds with ZIP+4 barcode.
   - ❏ City/state/ZIP+4 line is at least $\frac{5}{8}$ inch from bottom edge of piece.
   - ❏ City/state/ZIP+4 line is no higher than $2\frac{1}{4}$ inches from bottom edge.
   - ❏ For window envelopes: minimum clearances between address block (including barcode) and window edges are maintained on all sides during "insert shift."

5. **Barcode and Lower Right Barcode Clear Zone**
   - ❏ Barcode is correctly positioned (in address block or barcode clear zone).
   - ❏ Barcode is readable.
   - ❏ Print reflectance minimum is met.
   - ❏ If barcoded in the barcode clear zone: no extraneous printing or other matter is in the zone.

6. **Other**
   - ❏ Aspect ratio is met.
   - ❏ Dimensions are within the letter-size standards and piece is automation-compatible.
   - ❏ Piece is at least $3\frac{1}{2}$ inches high.
   - ❏ Piece is at least 5 inches long.
   - ❏ If no larger than $4\frac{1}{4}$ inches by 6 inches, piece is at least 0.007 inch thick, and at least 0.009 inch thick if piece is larger than $4\frac{1}{4}$ inches by 6 inches.
   - ❏ For official mail: endorsed "Official Business, Penalty for Private Use $300" in the upper left area.

OCR Readability

(Letter-Size Mail Including Cards)

1. **Mailpiece Material**
   - ❏ For envelopes, paper is at least 16-pound weight.
   - ❏ For cards, paper is at least 71.25-pound offset.

2. **Printing Characteristics**
   - ❏ Stock (including inserts that show through windows) is white or, if colored, reflects at least 50 percent red and 45 percent green.
   - ❏ Print contrast ratio is at least 40 percent (for glassine windows, 45 percent) in the red and green portions of the optical spectrum.
   - ❏ Print contrast is sharp and uniform, without voids, smudges, or extraneous ink.
   - ❏ Ink is black or a dark color.
   - ❏ Underlines, halftone backgrounds, or nonaddress printing are used little or not at all.

3. **Clear Zones**
   - ❏ MLOCR read area is free of return address. Logos and other extraneous printing are above the delivery address line.
   - ❏ POSTNET barcode clear zone is free of printing and patterns except for the barcode.
   - ❏ FIM clear zone is free of printing except for the FIM.

4. **Layout**
   - ❏ For windows, inserts clear the edges by at least ⅛ inch on all sides through the full range of shift.
   - ❏ Piece measures at least 3½ inches high, 5 inches long, and .007 inch thick.
   - ❏ Piece is not larger than 6⅛ inches high, 11½ inches long, and ¼ inch thick.

5. **Address Block**
   - ❏ Block is at least ½ inch from both edges of envelope and between ⅝ inch and 2¾ inches from bottom edge.
   - ❏ Letters are all capitals and at least ³⁄₁₆ inch high.
   - ❏ Left margin is uniform, state uses standard 2-letter abbreviation, and block includes ZIP Code or ZIP+4.
   - ❏ Font has uniform stroke widths between ¾ point and 2 points and is a simple, sans serif style.
   - ❏ Characters are between 8 and 18 points high, inclusive.
   - ❏ Characters are spaced between ¾ point and 3 points apart.
   - ❏ Words are spaced between 1 and 5 em spaces (full-size character spaces) apart.
   - ❏ Lines are spaced between 2 points and 2 em spaces (full-size character heights) apart.
   - ❏ Address is not skewed more than 5 degrees.

G | Quick Service Guides

Addressing

Related QSGs: 810, 820, 830

Overview	The delivery address specifies where the USPS is to deliver a mailpiece. The address must be legible and complete on the side of the mailpiece that bears the postage.
General Information (A010)	Placement and Location (A010.1) The placement of the address can determine mailability of the mailpiece and/or rate and eligibility. See next page for proper placement of an address block on letter-size and flat-size pieces.
Complete Addresses (A010.3)	The address must include: ■ Intended recipient's name or other designation. ■ Delivery address (including street number and name (predirectional, suffix, and postdirectional as appropriate), post office box number, rural or highway contract route and box number) and secondary descriptor and number (e.g., suite or apartment number, floor) if needed. ■ City and state. ■ ZIP Code or ZIP+4 code where required. The address on automation rate mail must be sufficiently complete to enable matching the current USPS ZIP+4 File when using current CASS-certified address matching software (A800.1). Standardized address elements are not required.
Return Address (A010.4)	A return address tells the USPS where the sender wants the mail returned if it is undeliverable. A return address is required on certain types of mail. Mail qualifying for Nonprofit Standard Mail rates must have the name and return address of the authorized nonprofit organization either on the outside of the mailpiece or in a prominent location on the material being mailed (inside the mailpiece) (E670).
Alternative Addressing Formats (A020)	Simplified addressing: simplified address format ("Postal Customer") is used when general distribution is requested to each customer on a rural route or highway contract route or to each boxholder at a post office without city carrier service. Government agencies may also use simplified addressing for official matter being sent to all stops on city carrier routes and post office boxholders at post offices with city carrier service. Occupant addressing: mailer may use "Occupant" (instead of a recipient's name) with a *complete* delivery address on mail intended for selective distribution. Exceptional addressing: indicates that mailpiece should be delivered to the current resident if addressee has moved. Exceptional addressing may not be used on certain types of mail.
Addressing Guidelines	The following guidelines for addressing a mailpiece are in USPS Publication 28, *Postal Addressing Standards:* ■ Use simple sans serif type with uniform stroke thickness. ■ Type or machine-print in dark ink on a light background with a uniform left margin. ■ Left-justify every line in the address block. ■ Use two-letter state abbreviations. ■ Use one space between city and state, two spaces between state and ZIP+4 code. ■ Use appropriate ZIP+4 code (if unknown, use 5-digit ZIP Code).

```
JOHN DOE
JOHNSON MANUFACTURING
500 E MAIN ST STE 222
KANSAS CITY MO  64100-1234
```

This guide is an overview only. For the specific DMM standards applicable to this category of mail, consult the DMM sections referenced above and the general sections within each DMM module.

010

Addressing

←—————— 50% of Length ——————→

Return Address Area

33% of Height

Postage Area

1/2"

2-3/4"

MLOCR Read Area
(Position address block in this area.)

1/2"

5/8"

Barcode Clear Zone
4-3/4" x 5/8"

(Not Actual Size)

←—————— 4-3/4" ——————→

Return Address Area

Postage Area

Nonaddress Data	**CSM 12345****
Information/Attention	**MR JOHN DOE**[1]
Name of Recipient	**JOHN DOE COMPANY**
Delivery Address	**2020 N LINCOLN AVE APT 201**
Post Office/State/ZIP	**CHICAGO IL 60614-1234**

Barcode Clear Zone
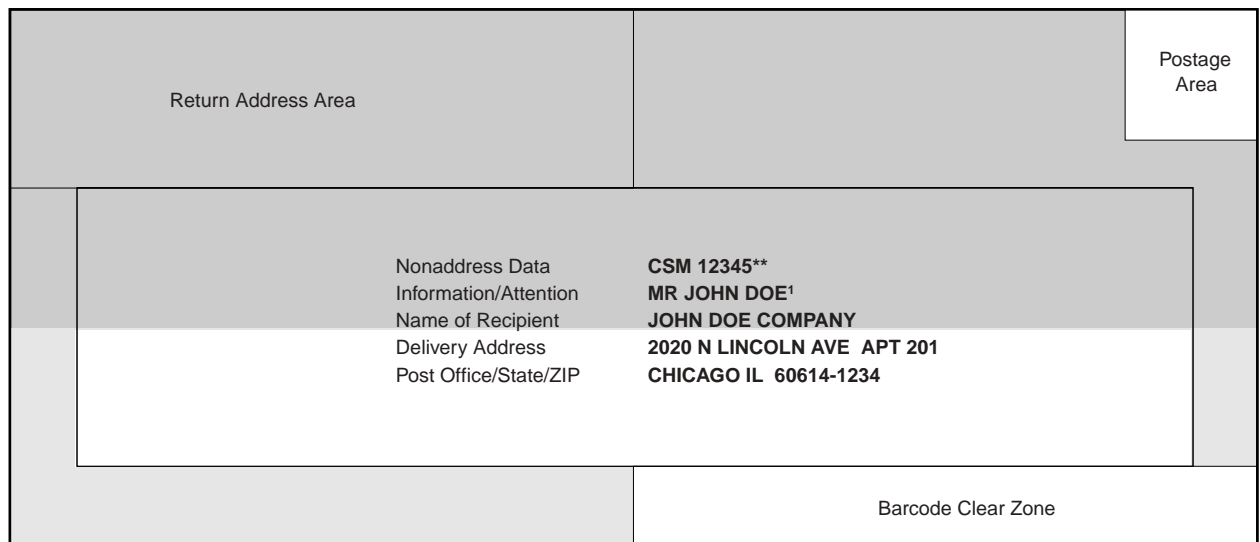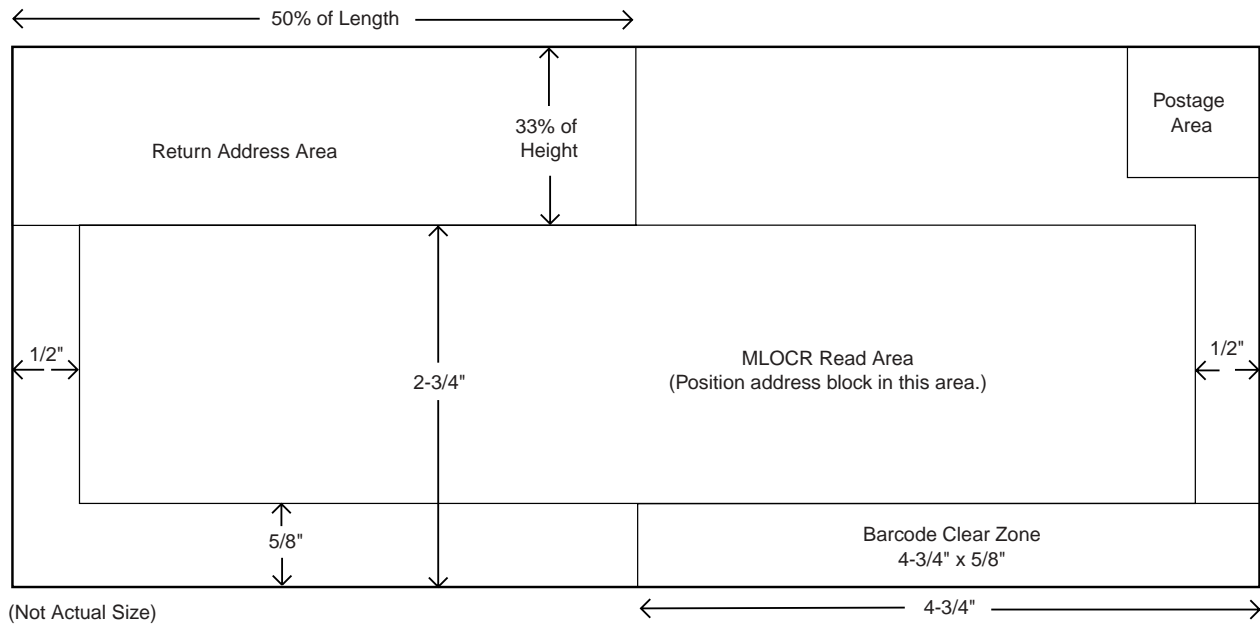
1. For MLOCR *FASTforward*[SM] users, the name of the recipient must appear in the OCR read area.
Dark shaded area indicates "free space" for nonaddress printing.
Light shaded area indicates preferred clear zone to enhance readability.

Designing Letters and Cards
for Automated Processing

Related QSGs: 131, 140, 240, 631, 640, 811

<div style="float:right">

810

Quick Service
Guide

</div>

Overview Letter-size mail (including postcards) meeting the applicable automation standards is entitled to automation rates. This Quick Service Guide summarizes the standards for mail with 100% delivery point barcodes and mail without barcodes processed on USPS optical character readers (OCRs).

Characteristics and Content (C810, C840) Must meet all physical standards in C810.

Shape: rectangular. Aspect ratio from 1.3 to 2.5 (C810.2).

Dimensions:

- Minimum: 3-1/2 inches high, 5 inches long, and either 0.007 inch thick *if not more than 4-1/4 inches high and 6 inches long;* or 0.009 inch thick *if more than 4-1/4 inches high or 6 inches long, or both.*
- Maximum for cards at card rates: 4-1/4 inches high, 6 inches long, and 0.016 inch thick.
- Maximum for letters and other cards: 6-1/8 inches high, 11-1/2 inches long, 1/4 inch thick.

Maximum Weight:

- First-Class Mail Machinable Presorted—3.3 ounces (0.2063 pound)
- First-Class Mail Automation—3.3 ounces (0.2063 pound)[1]
- Periodicals Automation—3.3 ounces (0.2063 pound)[1]
- Standard Mail Machinable Presorted—3.3 ounces (0.2063 pound)
- Standard Mail Automation Regular—3.5 ounces (0.2188 pound)[1]
- Enhanced Carrier Route High Density and Saturation—3.5 ounces (0.2188 pound)[1]
- Enhanced Carrier Route Automation—3.5 ounces (0.2188 pound)[1]

1. Letters weighing over 3 ounces must bear an address block delivery point barcode under C840, be part of a 100% delivery point barcoded mailing, and be prepared in a sealed envelope. Heavy letters may neither contain stiff enclosures nor be prepared as a self-mailer or booklet-type mailpiece.

Prohibitions:

- Polywrap, polybag, and shrinkwrap.
- Clasps, strings, staples, buttons, or protrusions that might impede or damage the mail or mail processing equipment (C810.3).

Other machinability standards:

- Regular shape, with adequate flexibility and rigidity (C810.5).
- Tabbing for self-mailers or pieces with open edges (see C810 or Quick Service Guide 811).

Pieces with delivery point barcodes must meet all standards in C840:

- Format of barcode bars (e.g., dimensions and spacing, C840.4).
- Minimum clearance around barcode for barcodes printed on a mailpiece or label: 1/8 inch on left and right sides; 1/25 inch above and below barcode.
- Placement of address block barcode, lower right barcode, or barcode within a window: see next page.
- Reflectance standards for barcode and portion of mailpiece on which barcode is printed (C840.5).

This guide is an overview only. For the specific DMM standards applicable to this category of mail, consult the DMM sections referenced above and the general sections within each DMM module.

810

**Quick Service
Guide**

Designing Letters and Cards
for Automated Processing

Physical Standards for Automation-Compatible Mail (C840)

(Not actual size)

Barcode Clear Zone: 4-3/4" x 5/8"
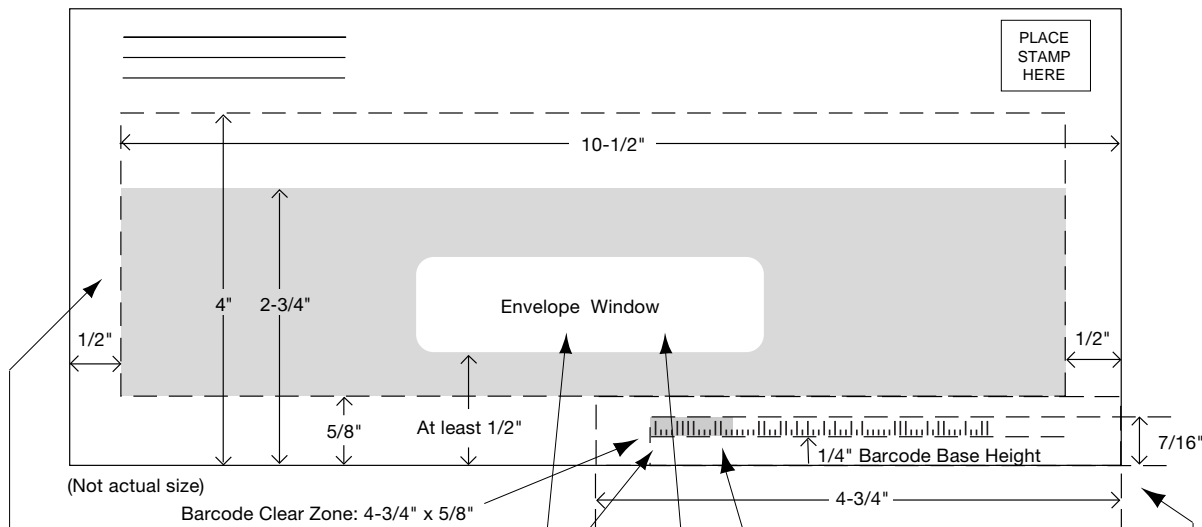
Barcode Location: DPBC either within address block or within barcode clear zone in lower right corner of mailpiece (C840.2).

Address Block Barcode: (C840.2) Within address block (shown by dashed lines) must be:
- Rightmost bar—at least 1/2" from right edge of the mailpiece.
- Leftmost bar—less than 10-1/2" from right edge, and at least 1/2" from the left edge.
- Top of each bar—less than 4" from bottom edge of mailpiece.
- Bottom line in address block including barcode—at least 5/8" from bottom edge of mailpiece.

Recommended Address Placement:
On a letter-size piece, the recommended address placement is within the optical character reader (OCR) read area, which is a space on the address side of the mailpiece defined by these boundaries (A010.1.3):
- Left: 1/2 inch from the left edge of the piece.
- Right: 1/2 inch from the right edge of the piece.
- Top: 2-3/4 inches from the bottom edge of the piece.
- Bottom: 5/8 inch from the bottom edge of the piece.

Barcode Skew: See C840.6.

Envelope Window:
1/8"—minimum clear space between barcode and right and left edges of window. 1/25"—minimum clear space between barcode and top and bottom edges of window.

Clear space must be maintained when insert is moved to its full limits in each direction within envelope (C840.2).

For Barcode in Lower Right Corner Location: Leftmost bar between 4-1/4" and 3-1/2" from right edge (C840.2).

Barcode Window: If the barcode is printed on an insert to appear through a window in the lower right corner, see C840.2. For barcode placement and window dimensions, see C840.7.

Tabs and Wafer Seals

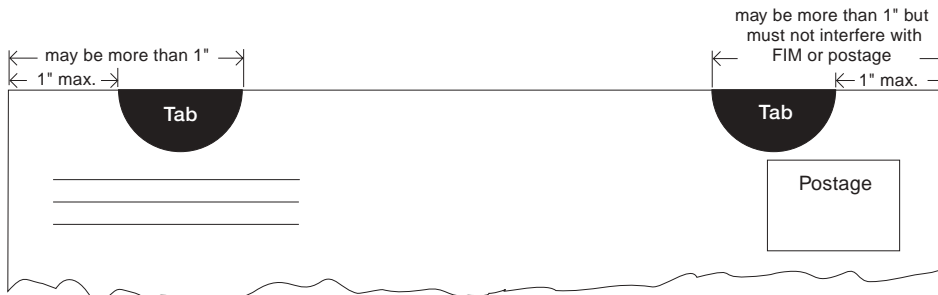**Related QSGs: 811, 923, 924**

811

Quick Service
Guide

Overview

Unenveloped letter-size mailpieces prepared for automation rate mailings must be secured (tabbed) to prevent an open edge from jamming high-speed processing equipment. Construction of the mailpiece plays an important role in determining automation compatibility. Standards for tabbing are based on basis weight of paper stock used and the location of the folded or bound edge. As an alternative to tabs or wafer seals, the open edge of the length of the mailpiece may be continuously glued or spot glued. Continuous glue or spot glue is permissible with single-sheet self-mailers and cards.

Characteristics and Content
(C810.4, C820.4)

Number and location of tabs or wafer seals are specified for particular types of letter mail. In all cases, additional tabs may be used.

Tabs, wafer seals, tape, or glue must not interfere with recognition of postage, facing identification mark (FIM), rate markings, required address information, or barcode. If placed in the barcode clear zone, tabs or wafer seals must contain a paper face meeting the standards for background reflectance and ink acceptance, except when a delivery point barcode appears in the address block.

Adequate adhesion is required.

Basis weight: the minimum basis weight standards vary, depending on the construction of the mailpiece (see next page) and the sheet size below.

Letter-Size Folded Self-Mailers
(C810.8)

Folded edge (top or bottom) must be parallel to the longest dimension (length) and address of the mailpiece.

With one tab or wafer seal: folded edge at bottom of mailpiece, tab or wafer seal in middle of top edge of mailpiece.

- Single folded sheet, sealed with one tab or wafer seal, minimum basis weight: 28 pounds (17 by 22 inches by 500 sheets) or 70 pounds (25 by 38 inches by 500 sheets).
- Two or more sheets, sealed with one tab or wafer seal, minimum basis weight: 24 pounds (17 by 22 inches by 500 sheets) or 60 pounds (25 by 38 inches by 500 sheets).

With two tabs or wafer seals: minimum basis weight 20 pounds (17 by 22 inches by 500 sheets) if folded edge is at top or bottom of the mailpiece. Tabs or wafer seals must be placed within 1 inch of the right and left edges of mailpiece (see next page).

With folded edge on right (leading) edge: left (trailing) edge secured with at least one tab or a glue line; additional tabs may be required based on trim size and basis weight. Pieces 7 or more inches in length must be secured at top and bottom edges and be preapproved by the USPS.

Letter-Size Booklet-Type Mailpiece
(C810.8)

The bound edge (spine) must be at the bottom and parallel to the longest dimension (length) and the address of the mailpiece, unless preapproved by the USPS. The mailpiece must be tabbed (secured) in one of two ways:

- Top (unbound edge) must have at least two tabs or wafer seals placed within 1 inch of the right and left edges (see next page).
- The right (leading) and left (trailing) edges must be secured with tabs or wafer seals placed within 1 inch of the top right and top left edges of the mailpiece.

Cover must have a minimum basis weight of 20 pounds.

With spine on right (leading) edge: minimum basis weight 20-pound bond paper. Address must be parallel to longest dimension (length) and unbound left (trailing) edge must be tabbed (secured):

- If no more than 4-1/4 inches high and 6 inches long, 1 tab or wafer seal in middle of trailing left edge.
- If more than 4-1/4 inches high and 6 inches long, 2 tabs or wafer seals within 1 inch of top and bottom edges.

Postcard
(C810.8)

Minimum basis weight 75 pounds or greater. Double postcards not sealed on all edges must have folded edge at the top or bottom. The open edge must be secured with 1 tab in the middle.

Flat-Size Booklet-Type Mailpieces
(C820.6)

The contents of the mailpiece prepared in sleeves or other wrappers must be sufficiently secure in the sleeve or wrapper to stay in place during processing. If material bearing the delivery information 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.

This guide is an overview only. For the specific DMM standards applicable to this category of mail, consult the DMM sections referenced above and the general sections within each DMM module.

811

Tabs and Wafer Seals

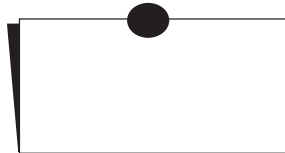## Placement of Tabs and Wafer Seals

← may be more than 1" →
← 1" max. →

may be more than 1" but
must not interfere with
FIM or postage
← 1" max. →

Tab

Tab

Postage

Specifications for Automation-Compatible Letter-Size Mailpieces

Double Postcard
Tabs	1 (middle)
Folded Edge	Top or Bottom
Sheets	Single
Basis Weight	75 lb.

Folded Self-Mailer
Tabs	2 (start ≤ 1 inch from edges)
Folded Edge	Top or Bottom
Sheets	Single
Basis Weight	20 lb.

Folded Self-Mailer
Tabs	1 (middle)
Folded Edge	Bottom
Sheets	Multiple
Basis Weight	24 lb.

Folded Self-Mailer
Tabs	1 (middle)
Folded Edge	Bottom
Sheets	Single
Basis Weight	28 lb.

Folded Self-Mailer[1]
Tabs	1 (middle)
Folded Edge	Right
Sheets	Single
Basis Weight	75 lb.

1. Pieces 7 inches or longer must be sealed on the top and bottom; the middle tab is optional (C810.8).

An 8-1/2 x 11 inch sheet of 20, 24, or 28 pound paper folded once to 8-1/2 x 5-1/2 inches does not meet the minimum thickness of 0.009 inch for an automation-compatible letter.

Folded Self-Mailer
(Invitation Fold)
Tab	Address Label
Folds	Top and Bottom
Sheets	Multiple
Basis Weight	20 lb.

JOHN DOE
BRUCE MANFACTURING
500 E MAIN ST STE 222
KANSAS CITY MO 64100-1234

Folded Self-Mailer
(Continuous Glue Strip)
Open Edge	Top
Folded Edge	Bottom
Sheets	Single
Basis Weight	20 lb.

Booklet
Tabs	2 (start ≤ 1 inch from edges)
Spine	Bottom
Sheets	Multiple with Cover
Basis Weight	20 lb. (Cover)

Folded Booklet
Tabs	2 (start ≤1 inch from edges)
Spine	Top
Folded Edge	Bottom
Sheets	Multiple with Cover
Basis Weight	20 lb. (Cover)

Spine

Folded Booklet
Tabs	2 (start ≤ 1 inch from top edge)
Spine	Top
Folded Edge	Bottom
Sheets	Multiple with Cover
Basis Weight	20 lb. (Cover)

Spine

Booklet
Tabs	2 (start ≤ 1 inch from top and bottom edges)
Spine	Right (open edge left)
Sheets	Multiple with Cover
Basis Weight	24 lb. (Cover)

Business Reply Mail (BRM)

922

Related QSGs: 811, 923, 924

Overview For an annual permit fee, a business reply mail (BRM) permit is available for distributing business reply cards, envelopes, self-mailers, cartons, and labels. BRM allows the permit holder to receive First-Class Mail and Priority Mail back from customers by paying postage only on the mail returned. The BRM permit holder guarantees payment of First-Class Mail postage plus a per-piece charge for pieces returned by the USPS (see payment options below). When designing a BRM mailpiece or label, mailers must consult with their local post office. The piece must conform to a specific format to qualify as BRM, including a unique ZIP+4 code assigned by the USPS. Proofs for regular BRM should be approved by the USPS before printing. Proofs for Qualified Business Reply Mail (QBRM) must be approved by the USPS. On the next page is a layout example for a BRM envelope. BRM pieces distributed in automation rate mailings are required to meet automation compatibility standards. BRM templates are available on the Postal Explorer web site at http://pe.usps.gov by selecting "Mailpiece Design" in the left frame.

Payment Options (S922) **Basic BRM**—Annual perimit fee of $150.
Per piece charge of $0.60 plus First-Class Mail postage. Paid through a regular postage-due account or by cash/check on delivery.

> Cost per piece
> *First-Class postage + 60¢*
> Letter (1 oz.): 37¢ + 60¢ = 97¢
> Card Rate: 23¢ + 60¢ = 83¢

High-Volume BRM—Annual permit fee ($150) plus an annual accounting fee of $475 for each separation.
Per piece charge of $0.10 plus First-Class Mail postage. Paid through BRM advance deposit account only. Best suited if return volume is approximately 950 pieces or more per year.

> Cost per piece
> *First-Class postage + 10¢*
> Letter (1 oz.): 37¢ + 10¢ = 47¢
> Card Rate: 23¢ + 10¢ = 33¢

Basic Qualified Business Reply Mail (QBRM)—Annual permit fee ($150) plus an annual accounting fee of $475.
Per piece charge of $0.06 plus a lower QBRM automation First-Class Mail postage rate. Paid through BRM advance deposit account only. Used only on barcoded automation-compatible cards and letter-size mail weighing up to 2 ounces if design is approved for QBRM by USPS before distribution (E150.2). A unique ZIP+4 code is assigned by the USPS for each rate category of QBRM to be returned (one for card-rate pieces, one for letter-size pieces weighing 1 ounce or less, and one for letter-size pieces weighing over 1 ounce up to 2 ounces). Best suited if return volume is approximately 834 pieces or more annually.

> Cost per piece
> *QBRM postage + 6¢*
> Letter (1 oz.): 34¢ + 6¢ = 40¢
> Card Rate: 20¢ + 6¢ = 26¢

High-Volume QBRM—Annual permit fee ($150) and annual accounting fee ($475) and separate quarterly fee of $1,800. Mailers can pay additional quarterly fee for any consecutive 3-calendar month period. Per piece charge $0.008 plus lower QBRM automation First-Class Mail postage rate. Paid through BRM advanced deposit account only. Best suited if return volume is approximately 34,615 pieces or more quarterly.

> Cost per piece
> *QBRM postage + 0.8¢*
> Letter (1 oz.): 34¢ + 0.8¢ = 34.8¢
> Card Rate: 20¢ + 0.8¢ = 20.8¢

Other Post Offices A BRM permit holder can allow its authorized representatives or agents to use that permit number to receive BRM at any other post office. The original permit holder must supply the representative with a letter authorizing the use of the BRM permit and a copy of the USPS receipt showing the annual fee payment for that permit. See S922.8 for additional requirements.

Official Mail Authorized users of official mail may distribute BRM, subject to E060 and S922.

This guide is an overview only. For the specific DMM standards applicable to this category of mail, consult the DMM sections referenced above and the general sections within each DMM module.

922

Business Reply Mail (BRM)

Business Reply Mail Layout Guidelines (S922.5)

Permit Holder Space: May contain information such as return address, logos, distribution codes, and form numbers.
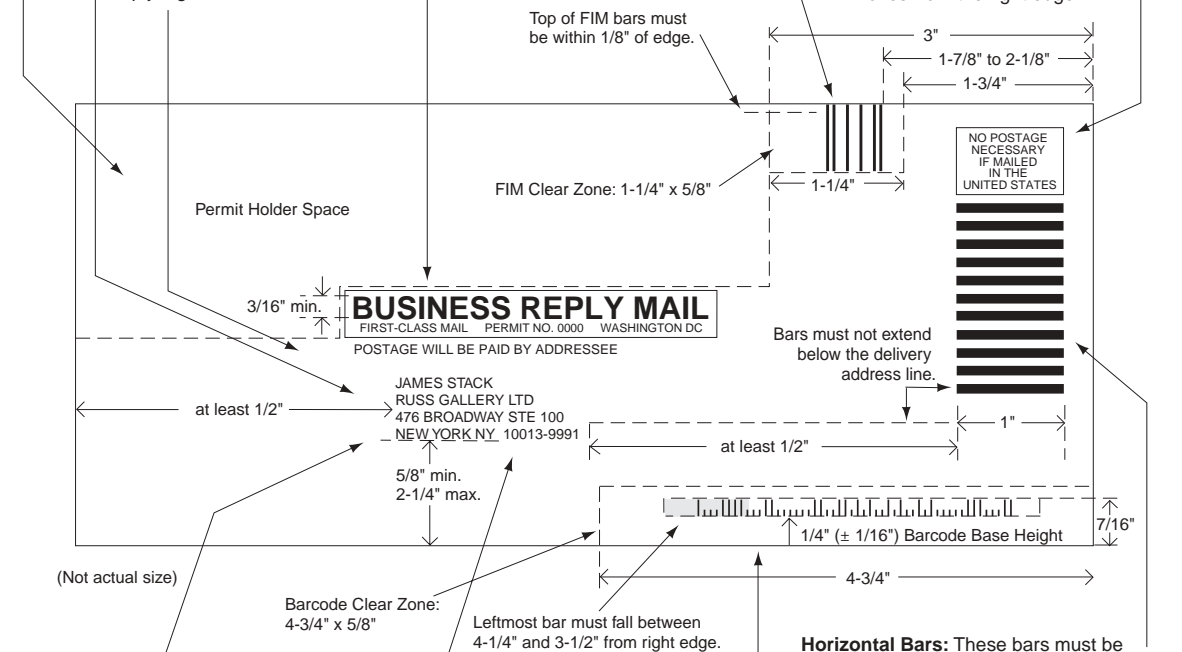
Company Logo: For barcoded pieces, a company logo is permitted in the address block if it is placed no lower than 5/8 inch from the bottom edge of the mailpiece and does not interfere with the barcode clear zone.

Postage Paid Line: Place the endorsement "POSTAGE WILL BE PAID BY ADDRESSEE" (in capital letters) under the business reply legend box.

Business Reply Legend: The words "BUSINESS REPLY MAIL" are required above the address in capital (uppercase) letters. Immediately below, place the words "FIRST-CLASS MAIL PERMIT NO." followed by the permit number and the name of the issuing post office (city and state) in capital letters.

Facing Identification Mark (FIM): A FIM pattern (specifically FIM B without barcode or FIM C with barcode) is required on all BRM postcards and letter-size mailpieces. The FIM clear zone must contain no printed matter other than the FIM pattern. FIM bars must be between 1/2 and 3/4 inch high and 0.03125 inch (1/32 inch) (± 0.008 inch) wide.

Postage Imprint: "NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES" must appear in the upper right corner of the mailpiece and must not extend more than 1-3/4 inches from the right edge.

Top of FIM bars must be within 1/8" of edge.

3"

1-7/8" to 2-1/8"

1-3/4"

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

FIM Clear Zone: 1-1/4" x 5/8"

1-1/4"

Permit Holder Space

BUSINESS REPLY MAIL
FIRST-CLASS MAIL   PERMIT NO. 0000   WASHINGTON DC
POSTAGE WILL BE PAID BY ADDRESSEE

3/16" min.

Bars must not extend below the delivery address line.

JAMES STACK
RUSS GALLERY LTD
476 BROADWAY STE 100
NEW YORK NY 10013-9991

at least 1/2"

5/8" min.
2-1/4" max.

at least 1/2"

1"

(Not actual size)

1/4" (± 1/16") Barcode Base Height

7/16"

Barcode Clear Zone: 4-3/4" x 5/8"

Leftmost bar must fall between 4-1/4" and 3-1/2" from right edge.

4-3/4"

Address Format: The complete address, including the name of the permit holder (company or individual), must be printed on the mailpiece.

ZIP Code: A unique ZIP+4 code is assigned to each piece.

Horizontal Bars: These bars must be uniform in length, at least 1 inch long and 1/16 to 3/16 inch thick, and evenly spaced. The bars may not extend below the delivery address line, which is located directly above the line containing the city, state, and ZIP Code.

Before printing, submit proofs of BRM samples to your local post office for advice and approval. Take advantage of this service—it could save you money. Qualified Business Reply Mail pieces must be approved by the USPS before printing.

POSTNET Barcode Location: The barcode must be located here (unless an address block barcode is used on a window envelope or printed address label). The barcode must be a ZIP+4 barcode (delivery point barcodes are not permitted). This area must be free of any printing other than the barcode. A free camera-ready barcode positive may be obtained from your local post office.

Dimensions: Between 3-1/2 by 5 inches and 6-1/8 by 11-1/2 inches. To qualify for the card rate, cards must be between 3-1/2 by 5 inches and 4-1/4 by 6 inches and between 0.007 and 0.016 inch thick. Larger card sizes are mailable, but they are charged at First-Class Mail letter rate.

Barcoded pieces measuring more than 4-1/4 inches high or 6 inches long must be at least 0.009 inch thick.
— Additional standards apply to QBRM pieces (S922.7).
— A surcharge is assessed for nonmachinable letters (C050.2.2) weighing 1 ounce or less.

Ink/Paper Colors and Type Styles: Not all colors of paper and/or ink and type styles are compatible with automated equipment. Contact your local post office for guidance.

All letter-size reply cards and envelopes (business reply, courtesy reply, and meter reply mail) provided as enclosures in automation First-Class Mail, Periodicals, and Standard Mail must meet the standards in C810.8.

Courtesy Reply Mail (CRM)

Overview   Courtesy reply mail (CRM) consists of preaddressed postcards or envelopes provided by the mailer to customers both to expedite their responses and to provide more accurate delivery. It differs from business reply mail (BRM) in that no fees are required and the respondent is responsible for applying the correct postage before mailing back the card or envelope. CRM can come back faster because it is prepared with the correct address and barcode to take advantage of automated USPS processing. It is also good to use when you wish to direct replies (payments) to an address that is different from your usual mailing address. CRM templates are available on the Postal Explorer web site at http://pe.usps.gov by selecting "Mailpiece Design" in the left frame.

The USPS provides *free of charge* the facing identification mark (FIM) and the appropriate barcode to print on CRM pieces. The guidelines on the reverse will help optimize the use of this format.

Market research shows that providing barcoded envelopes makes good business sense:
- Barcoded reply envelopes can be processed and delivered faster by the post office.
- Customers save the time required to find an envelope, look up an address, and then write or type the address.
- Customers with correctly addressed return envelopes do not make addressing errors that can delay your returns.
- Customers and donors return payments and pledges significantly faster when supplied with a return envelope.
- Providers of return envelopes get remittance faster for optimum cash flow.
- Customers who are "thanked" by the back copy on the envelope flap are more likely to repeat the performance of mailing remittances or donations.
- Automated processing of properly prepared barcoded reply mail provides accurate sorting and eliminates mail delay.
- Customers have positive attitudes about creditors, marketers, and fund raisers who show thoughtfulness in providing reply envelopes.
- Providers of reply mail envelopes get orders faster, reducing inventories and their investment in them.
- Providers of reply envelopes receive and fulfill orders sooner, which improves customer relations.
- Providers using barcoded reply envelopes see faster initial response, giving them an earlier projection of future activity.

Barcodes   Barcodes may be placed either in the address block or in the lower right barcode clear zone. The
(C840)   correct barcode could be a delivery point barcode, a ZIP+4 barcode (if the address is assigned an individual (unique) ZIP+4 code), or, in some cases, a 5-digit barcode (if the address is assigned a firm (unique) 5-digit ZIP Code).

All letter-size reply cards and envelopes (business reply, courtesy reply, and meter reply mail) provided as enclosures in automation First-Class Mail, Periodicals, and Standard Mail must meet the standards in C810.8.

923

Courtesy Reply Mail (CRM)

Courtesy Reply Mail Layout Guidelines

Facing Identification Mark (FIM): Use FIM A on all courtesy reply mail postcards and letter-size mailpieces with the appropriate POSTNET barcode. This permits computerized cancellation equipment to align, postmark, and direct the mailpiece properly.

FIM Location: The FIM clear zone must contain no printed matter other than the FIM A pattern. FIM bars must be between 1/2 and 3/4 inch high and 0.03125 (1/32 inch) (± 0.008 inch) wide.

Top of FIM bars must be within 1/8" of edge.

3"

1-7/8" to 2-1/8"

1-3/4"

PLACE STAMP HERE

FIM Clear Zone: 1-1/4" x 5/8"

2-3/4"

JAMES STACK
RUSS GALLERY LTD
476 BROADWAY STE 100
NEW YORK NY 10013-2621

1/2"

1/2"

5/8"

1/4" Barcode Base Height

7/16"

(Not actual size)

4-3/4"

Barcode Clear Zone: 4-3/4" x 5/8"

Leftmost bar must fall between 4-1/4" and 3-1/2" from right edge.

Address Format: The complete address, including the name of the sender (company or individual), must be printed directly on the mailpiece.

POSTNET Barcode Location: This area must be free of any printing other than the appropriate barcode (see reverse). A camera-ready barcode positive may be obtained from your local post office.

Dimensions: Between 3-1/2 by 5 inches and 6-1/8 by 11-1/2 inches. To qualify for the card rate, cards must be between 3-1/2 by 5 inches and 4-1/4 by 6 inches. Larger postcard sizes are mailable, but they are charged at the regular First-Class Mail letter rate. Postcard thickness must be between 0.007 and 0.016 inch.

If letter mail is more than 4-1/4 inches high or more than 6 inches long, it must be at least 0.009 inch thick.

A surcharge is assessed for nonstandard mailpieces weighing 1 ounce or less.

Ink/Paper Colors and Type Styles: Not all colors of paper and/or ink and type styles are compatible with automated equipment. Contact your local post office for guidance.

All letter-size reply cards and envelopes (business reply, courtesy reply, and meter reply mail) provided as enclosures in automation First-Class Mail, Periodicals, and Standard Mail must meet the standards in C810.8.
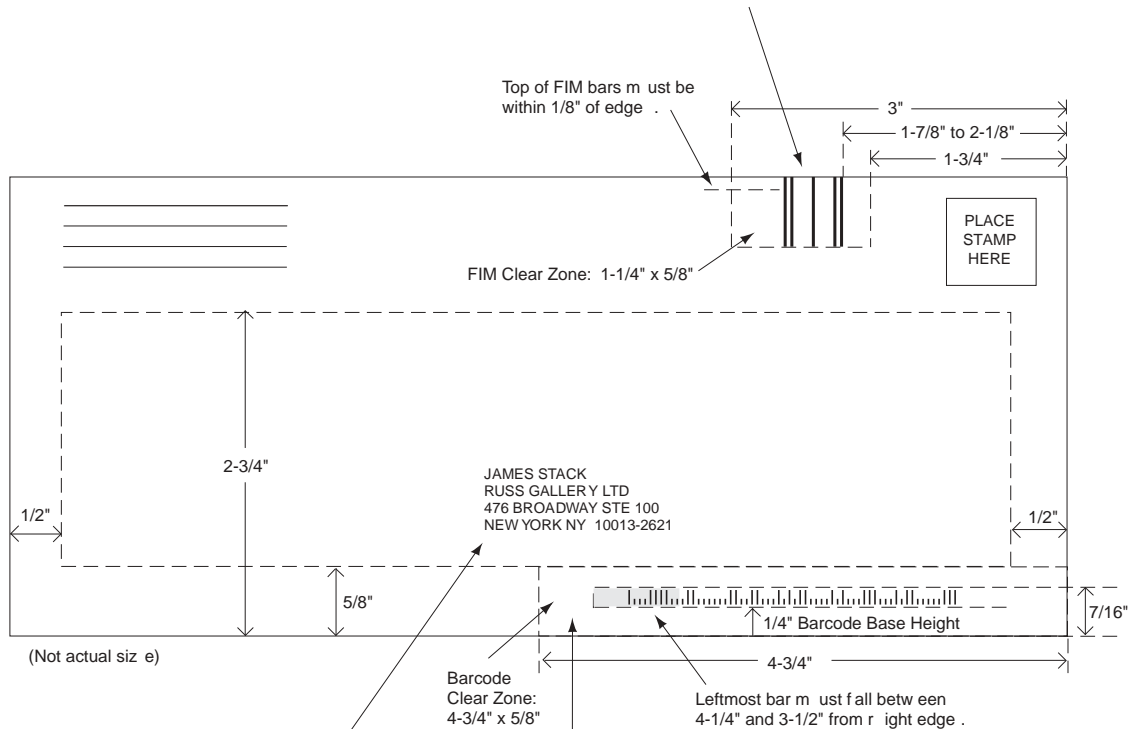
Meter Reply Mail (MRM)

Overview
(P030)

Meter stamps may be used to prepay reply postage on Express Mail; Priority Mail (up to 1 pound); all First-Class cards, letters, and flats up to a maximum of 13 ounces; single-piece Media Mail and Library Mail.

The USPS provides *free of charge* the FIM (facing identification mark) and appropriate barcode to print on meter reply letter-size mailpieces. The guidelines on the reverse will help optimize the use of this format.

The following conditions apply (P030.10):
- Meter stamp amount must be enough to pay postage in full. Meter stamps on reply cards and envelopes must fully prepay the correct postage.
- Meter stamps may be printed directly on a mailpiece or address label that bears the delivery address of the meter license holder. A label must adhere so that once applied, it cannot be removed in one piece. Reply mail prepaid with meter stamps is delivered only to the address of the license holder.
- Postage on Priority Mail over 13 ounces, single-piece Media Mail, and Library Mail may be paid only with meter-stamped address labels.
- Any photographic, mechanical, or electronic process (other than handwriting, typewriting, or handstamping) may be used to prepare the address side of meter reply mail. The address side must follow the style and content of the example on the reverse. The USPS will provide, free of charge, a FIM and the correct ZIP+4 code and delivery point barcode to be printed on letter-size envelopes.
- Meter stamps used to prepay reply postage must not show the date, except for IBI generated by a PC Postage system (P030.10.3).

Barcodes
(C840)

Barcodes on letter-size pieces may be placed either in the address block or in the lower right barcode clear zone. The correct barcode could be a delivery point barcode, a ZIP+4 barcode (if the address is assigned an individual (unique) ZIP+4 code), or, in some cases, a 5-digit barcode (if the address is assigned a firm (unique) 5-digit ZIP Code).

Envelopes and cards formatted for meter reply mail on which the mailer failed to imprint a meter stamp are treated as basic BRM (P011.1). Such mail is delivered after payment of postage and the applicable BRM per-piece charge (S922).

All letter-size reply cards and envelopes (business reply, courtesy reply, and meter reply mail) provided as enclosures in automation First-Class Mail, Periodicals, and Standard Mail must meet the standards in C810.8. For all other meter reply mailpieces, the use of FIMs and barcoding is encouraged.

This guide is an overview only. For the specific DMM standards applicable to this category of mail, consult the DMM sections referenced above and the general sections within each DMM module.
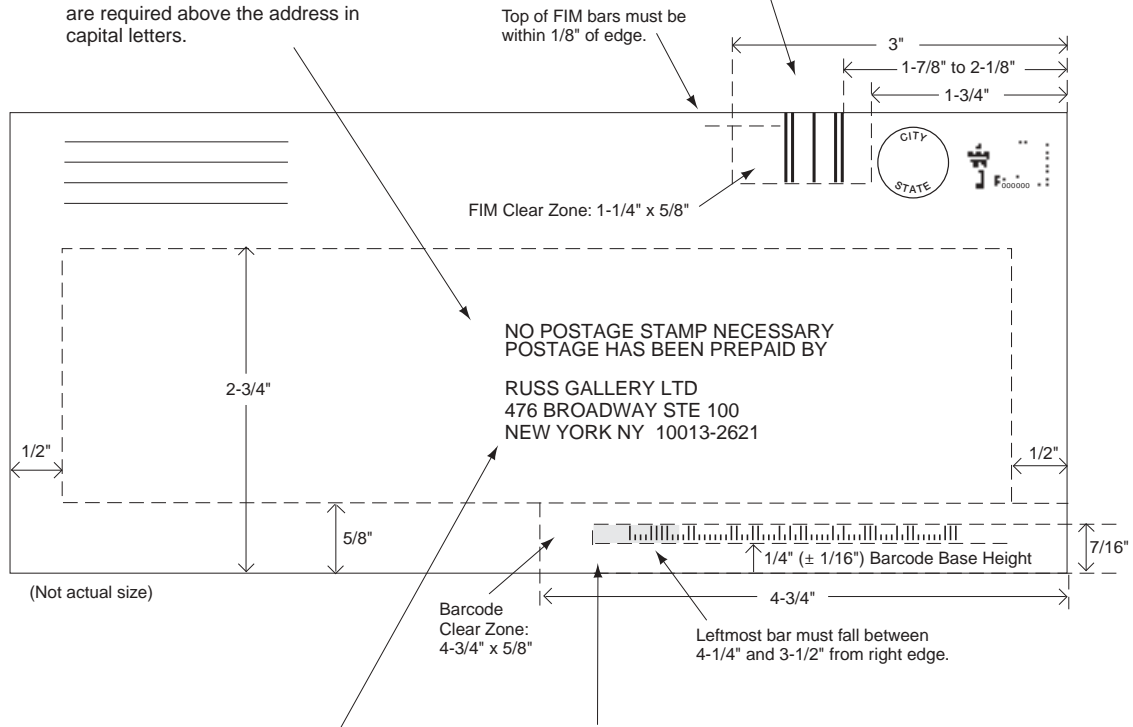
924

Meter Reply Mail (MRM)

Meter Reply Mail Layout Guidelines

Facing Identification Mark (FIM): Use FIM A on all meter reply mail postcards and letter-size mailpieces with the appropriate POSTNET barcode. This permits computerized cancellation equipment to align, postmark, and direct the mailpiece properly.

FIM Location: The FIM clear zone must contain no printed matter other than the FIM A pattern. FIM bars must be between 1/2 and 3/4 inch high and 0.03125 (1/32 inch) (± 0.008 inch) wide.

Legend: The words "NO POSTAGE STAMP NECESSARY POSTAGE HAS BEEN PREPAID BY" are required above the address in capital letters.

Top of FIM bars must be within 1/8 of edge.

3"
1-7/8" to 2-1/8"
1-3/4"

FIM Clear Zone: 1-1/4" x 5/8"

NO POSTAGE STAMP NECESSARY
POSTAGE HAS BEEN PREPAID BY

RUSS GALLERY LTD
476 BROADWAY STE 100
NEW YORK NY 10013-2621

2-3/4"

1/2"   1/2"

5/8"

7/16"

1/4" (± 1/16") Barcode Base Height

(Not actual size)

Barcode Clear Zone: 4-3/4" x 5/8"

Leftmost bar must fall between 4-1/4" and 3-1/2" from right edge.

4-3/4"

Address Format: The complete address of the meter license holder must be printed directly on the mailpiece.

POSTNET Barcode Location: This area must be free of any printing other than the appropriate barcode (see reverse). A camera-ready FIM and barcode are available free of charge from your local post office.

Dimensions: Between 3-1/2 by 5 inches and 6-1/8 by 11-1/2 inches. To qualify for the card rate, cards must be between 3-1/2 by 5 inches and 4-1/4 by 6 inches. Larger postcard sizes are mailable, but they are charged at the regular First-Class Mail letter rate. Card thickness must be between 0.007 and 0.016 inch.

If letter mail is more than 4-1/4 inches high or more than 6 inches long, it should be at least 0.009 inch thick.

A surcharge is assessed for nonmachinable mailpieces (C050.2.2) weighing 1 ounce or less.

Ink/Paper Colors and Type Styles: Not all colors of paper and/or ink and type styles are compatible with automated equipment. Contact your local post office for guidance.

All letter-size reply cards and envelopes (business reply, courtesy reply, and meter reply mail) provided as enclosures in automation First-Class Mail, Periodicals, and Standard Mail must meet the standards in C810.8.

H Ancillary Service Endorsements

Through ancillary service endorsements, you can request the addressee's new address and tell the USPS how to handle your undeliverable-as-addressed pieces. The endorsements consist of one keyword ("address," "forwarding," "return," or "change") followed by the two words "service requested."

The endorsements are the same for all classes of mail, but the treatment and cost differ by class of mail. Using an ancillary service endorsement means you will pay any forwarding, return, and address notification charges that apply.

Rules for Use

Endorsements must be located properly so you get the service you request.

A complete domestic return address must be placed in the upper left corner of the address side. A return address with multiple delivery must show a unit designation (such as an apartment number). The endorsement and return address must read in the same direction as the delivery address.
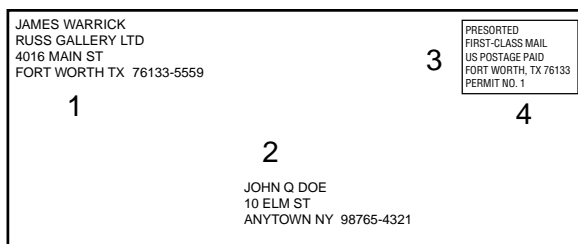
Endorsements must be printed, be no smaller than 8 points, and stand out clearly against the background with a 1/4-inch clear space around the endorsement—above, below, and on both sides. Brilliantly-colored envelopes and reverse printing are not permitted.

Any printing (including an endorsement or return address) on letter-size First-Class Mail or Standard Mail must not interfere with the delivery address lines within the MLOCR read area.

The endorsement must be placed in one of these four positions:

1. Directly below the return address.

2. Directly above the delivery address area (which includes the delivery address block and any related nonaddress elements such as a barcode, keyline, or optional endorsement line).

3. Directly to the left of the postage area and below any rate marking.

4. Directly below the postage area and below any rate marking.

For a detailed listing of the endorsements, see the following pages.

JAMES WARRICK
RUSS GALLERY LTD
4016 MAIN ST
FORT WORTH TX 76133-5559

PRESORTED
FIRST-CLASS MAIL
US POSTAGE PAID
FORT WORTH, TX 76133
PERMIT NO. 1

3

1

4

2

JOHN Q DOE
10 ELM ST
ANYTOWN NY 98765-4321

First-Class Mail Including Postcards Paid at the Card Rate

Mailer Endorsement	USPS Action on Undeliverable-As-Addressed Pieces
"Address Service Requested"	**If undeliverable:** Mailpiece returned with reason for nondelivery attached; no charge. **If change-of-address on file:** *Months 1 through 12:* Mailpiece forwarded at no charge. Separate notice of new address provided to sender; address correction fee charged. *Months 13 through 18:* Mailpiece returned with new address or reason for nondelivery attached; no charge. *After month 18:* Mailpiece returned with reason for nondelivery attached; no charge.
"Return Service Requested"	**If undeliverable or change-of-address on file:** Mailpiece returned with new address or reason for nondelivery attached; no charge.
"Change Service Requested"	**If undeliverable or change-of-address on file:** Electronic ACS notice of new address or reason for nondelivery provided to sender; address correction fee charged; mailpiece disposed of by USPS. Use of this endorsement on First-Class Mail is limited to mailers that participate in Address Change Service (ACS). This endorsement may not be used for mail with any special service (e.g., certified, registered mail). **First-Class Mail with no ACS participant code:** Same as USPS action for "Return Service Requested."
"Forwarding Service Requested"	**If undeliverable:** Mailpiece returned with reason for nondelivery attached; no charge. **If change-of-address on file:** *Months 1 through 12:* Mailpiece forwarded at no charge. *Months 13 through 18:* Mailpiece returned with new address or reason for nondelivery attached; no charge. *After month 18:* Mailpiece returned with reason for nondelivery attached; no charge.
"Temp—Return Service Requested"	**If undeliverable:** Mailpiece returned with reason for nondelivery attached; no charge. **If temporary change-of-address on file:** mailpiece forwarded to temporary change-of-address; no charge. **Otherwise:** Mailpiece returned with new address or reason for nondelivery attached; no charge. Temporary change-of-address information is not provided to the sender.
No endorsement	**If undeliverable or change-of-address on file:** Same as USPS action for "Forwarding Service Requested."

Postcards paid at the card rate under DMM C100 are returnable only if a return address is placed in the upper left corner of the address area or the upper left corner of the postcard, as appropriate. If no return address appears as described, then UAA postcards paid at the card rate are not returnable, and are disposed of by the USPS.

Standard Mail

Mailer Endorsement	USPS Action on Undeliverable-As-Addressed Pieces
"Address Service Requested"	**If undeliverable:** Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged). **If change-of-address on file:** *Months 1 through 12:* Mailpiece forwarded at no charge to addressee. Separate notice of new address provided to sender; address correction fee charged. *Months 13 through 18:* Mailpiece returned with new address or reason for nondelivery attached; weighted fee charged (address correction fee not charged). *After month 18:* Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).
"Forwarding Service Requested"	**If undeliverable:** Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged). **If change-of-address on file:** *Months 1 through 12:* Mailpiece forwarded at no charge to addressee. *Months 13 through 18:* Mailpiece returned with new address or reason for nondelivery attached; weighted fee charged (address correction fee not charged). *After month 18:* Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).
"Return Service Requested"	**If undeliverable or change-of-address on file:** Mailpiece returned with new address or reason for nondelivery attached; single-piece First-Class Mail or Priority Mail rate (as applicable) for weight of piece charged (address correction fee not charged).
"Change Service Requested"	**If undeliverable or change-of-address on file:** Notice of new address or reason for nondelivery provided to sender; address correction fee charged; mailpiece disposed of by USPS.
No endorsement	**If undeliverable or change-of-address on file:** Mailpiece disposed of by USPS.

Standard Mail matter is forwardable only to domestic addresses.

Weighted Fee used only when returning pieces endorsed "Address Service Requested," or "Forwarding Service Requested."