

Preflight

Proofing

**ApogeeX/
Plating**

**Design/
Mailing**

Outsource

Publisher

Special

EP Process Book





**Prior to working on this job
I HAVE READ & UNDERSTAND
all aspects of this JOB TICKET
including special instructions!**

EXAMPLES
↓

	DATE	JOB TICKET #	DESIGNER	PROOF READER	ORIG. PROOF	Electronic PREPRESS	ARCHIVE	Imposition PREPRESS	Final Copy PROOFED	PRESS OPERATOR	PRESS CHECK	CUTTER	BINDERY	SHIPPING
Designed In-House	7/3/04	33210	KL	HP	Cust. OK	KL	33210	LED/DM	DL	AP	BB	GY	SZ	TS
Exact Repeat	8/9/04	37551	Reprint	—	—	—	33210	LED	LED	AP	DM	GY	TS	SZ
Changes	9/5/04	40003	—	HP	Cust. OK	DL	40003	DL/LED/DM	LED	AP	DM	GY	TS	SZ
Copier Job	12/2/04	41111	AW	HP	JD	AW	—	AW	RG	RG	BB	DM	BB	TS
Outputs From Outside Shops To Little Falls	12/8/04	42008	BW	WG	Cust. OK	BW / DL	42008	DL	LED	SH	BB	DM	SZ	TS

Date: The date that the job was written up.

Job Ticket #: The current job number.

Designer: Initialed by a Spectrum Employee only when a file is being created or re-set. If a file was set up by the customer, we should write Cust. so that everyone knows where the file originated from.

Proof Reader: Must be initialed if we designed or made any changes to a file. The Proof Reader should sign this area after changes have been made. If major type changes were found the first time around, it should be proof read again!

Orig. Proof: After the piece has been proof read (if need be) and the customer has OK'd it (if proofed by the customer), then initial it as Cust. OK or with the original proofers initials. On output jobs that just require preflighting, whomever proofs our print to the customer supplied print out should sign this area.

Electronic Prepress: Initialed by the person(s) who are involved with the electronic files. (Making changes, outputting, etc.)

Archive: The number that a job was archived under. (This will be filled in and updated by the Little Falls West side shop only) We will be electronically storing jobs that get re-ran periodically.

Imposition Prepress: This will be initialed by the person responsible for choosing the imposition that a job is output with. It will also be initialed by the person who OK's the imposition before it goes to press.

Final Copy Proofed: Initialed by the person who does the final Blue-line and Plate check.

Press Operator: Initialed by the Press Operator or Operators

Press Check: Final proof while the job is on press to OK colors, imposition and content.

Cutter: Signed by the cutter operator.

Bindery: Includes anyone involved with any bindery operations. (Folding, scoring, stitching, etc)

Shipping: Anyone involved with final delivery preparations.

- NOTES:
- If a Job is an Exact Reprint, Please write in Reprint under Designer.
 - Use a Line — to indicate if any of the fields do not apply to a job.
 - All fields must be filled out, or the job will be stopped until all fields are properly completed.
 - Please allow room for additional initials in each section, if applicable.

EP Preflight Checklist

Scan The Job To Your Name
Read The Ticket
Create a job
Missing Elements
Update Links
Save As
Document Size
Colors
Gradients
Postal Specs, Indicia, etc.
Adjust Bleeds, Perfs, Score, And Fold Positions - Add Marks
Type Changes
Reflow
Spell Check
Trapping
Images Are .tif or .eps
Photo Resolution, Density, And Color
Print Proofs
Proofreading
Stamp & Label Proofs
Send Proof
Prepare Dieline Files For Output or Outsource
Prepare Spot Varnish
Send To ApogeeX

EP Preflight Overview

1. Scan the job to your name or designated area through PrintSmith.
2. Read the ticket thoroughly.
3. Create a job folder in the designated folder on the server (Job Number-Name_Name).
4. Launch the layout application and determine any missing elements (fonts, images, etc.).
5. Update any modified or missing links (be cautious that no images move or change size).
6. Save the document as job Number_Name (save the original if necessary).
7. Check the document size to see if it matches the tickets finished size.
8. Check colors (spot colors used, CMYK, black vs. registration).
9. Make sure that gradients are 100% color to 0% color, not 100% color to white.
10. Check postal specs, indicia's, & FPO.
11. Adjust bleeds, perfs, score, imprinting, and fold positions if necessary (if it is a major move contact CS first).
(add tic marks outside of the bleed when necessary).
12. Check dieline, and imprinting positions if applicable
13. Make any type changes that are necessary.
14. Check for type reflow, font appearance, and over all content.
15. Run spell check.
16. Turn application trapping off (adjust the trapping settings to knockout all).
17. Make sure all image formats are .tif or .eps.
18. Check photo resolution, density, and color (contact CS if low res).
19. Print out necessary proofs and give to proof reading.
20. If typo's or other mistakes are found, contact CS to determine the method of correction.
21. Send proof when ready. Stamp "Spectrum Proof" and write the number of the proof.
(email soft proof PDF, color copy proofs, B/W laser proofs, contract proofs, or blueline proofs).
22. Upon proof OK, choose the designated ApogeeX printer, send the job to the Apogee Server.
23. Run out a new proof if necessary, and stamp "Spectrum Proof" and label it final OK.

Scan The Job Through PrintSmith

Scan the barcode on the top right of the ticket. Make sure that the correct job number appears on the PrintSmith Workstation. Then scan the designated location in which to update your job (Usually under your name).

6/24/04 8:54 AM Thu

Job Ticket



Customer: #395 MOLL FORD
209 LEMIEUR ST
LITTLE FALLS MN 56345

Contact: STACY MOLL
Phone: (320) 632-0770

FAX:

Ordered on: 6/16/04 1:03 PM Wed

Wanted by: 7/2/04 Fri

Invoice # 38625

Job# 1 of 1

Source Inv:

PO Number:

Sales Rep: 10 LITTLE FALLS

Taken by: CS-AC/JD

Proof Due: 6/21/04 Mon

Proofed by: _____

Production

Some jobs have several elements to it, so be sure to scan every part (Job# 1 of 2, 2 of 2, etc.)

Read The Ticket Thoroughly

Read The Ticket Thoroughly


Sales Office
Sales Rep/CS Rep
Proof Due Date
Proofed By

Invoice (Job Number)

Number Of Pages Or
Elements To The Job

Customer Name &
Contact Info

Previous Job Number
Purchase Order Number

6/24/04 8:54 AM Thu **Job Ticket**  1 0 0 0 0 9 6 E 1 0 0 0 1 6

Customer: #395 MOLL FORD
209 LEMIEUR ST
LITTLE FALLS MN 56345
Contact: STACY MOLL
Phone: (320) 632-0770
FAX:
Ordered on: 6/16/04 1:03 PM Wed
Wanted by: 7/2/04 Fri

Invoice # 38625
Job# 1 of 1
Source Inv:
PO Number:
Sales Rep: 10 LITTLE FALLS
Taken by: CS-AC/JD
Proof Due: 6/21/04 Mon
Proofed by: _____

Production

Qty Ordered: 2,500
Description: Service Form

Special Instructions:
This form will be sent to Ennis for printing. We need to set up here. There will be no business heading on this form. Set-up as close to original as possible.
Form can be sent electronically to Ennis at: dewitt_custom@ennis.com. Please fax purchase order also after emailing file.
2 part 8.5 x 11.625 (has .162 tab on top)
Crash #'s in red - start @ 1001 & up
3 hole punch
standard blue ink on top with black ink on back
Refer to quote number 1793017
10-12 working days production

		Pre-Press	
Quantity	Description	Actual	Done
2:00	Typeset (hourly)	_____	_____
1	B&W Laser Proof	_____	_____

		Bindery	
Quantity	Description	Actual	Done
No Bindery operations on this job			

Delivery Info: Deliver Charge File Originals

Quantity
Job Description

Special
Instructions:
any special
information
needed to
complete
the job

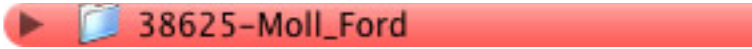
Pre-Press
Operations
And Proofs
Needed

Bindery
Operations
Needed

Shipping And Mailing Information Of Finished Product

Create A Job Folder

Create a job folder in the designated folder on the server (Job Number-Name_Name)
(Open Apple + Shift + N) Check to see if the customer has their own folder. Each job is filed alphabetically by the customers name on the ticket. For example, the job below "Moll_Ford" should be filed under the "M-S" folder.



If the customer is an individual, not a company, they should be filed by their last name. For example, Steve Zapf would be filed under the "T-Z" folder.

Label the job according to its status (Control + Click)



Folders Within A Job Folder May Include:

Fonts (Customer supplied fonts, or special fonts that are not a normal font in suitcase)

Originals (Customer supplied layout files or images that needed to be corrected or resaved)

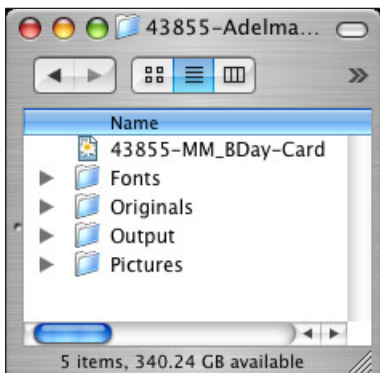
Output (Hi Res PDF files ONLY, if any changes were made, a new one needs to be made)

Pictures or Artwork (If there are several images for the job, putting them in a folder helps to keep the job clean and organized.)

Imprints (Files that are imprinting onto "Pre-Printed Stock" - "Masters" - "Customer Supplied Stock")

Old Files (Old files that are not being used presently, but may be used in future printings)

Working (Supplied files used to create PDF files, .psd files, etc.)





Saving Your Document


Go under File — Save As. Name your file: Job Number-Name_Name. Name the file according to what the tickets description reads.


 43855-MM_BDay-Card

If a photo or a piece of artwork is created, scanned, or resaved by us, Go under File — Save As. Name your file: “P Job Number-Name” if it is a Photoshop (Raster) image. Name your file: “A Job Number-Name” if it is an Illustrator (Vector) piece of art. Name the file according to what the tickets description reads. Example: P00000-4c_Logo or A00000-4c_Logo

 A47124-pg16_SLHV_SPECB.ai

 A47124-pg16_SLHV_SPECB.eps

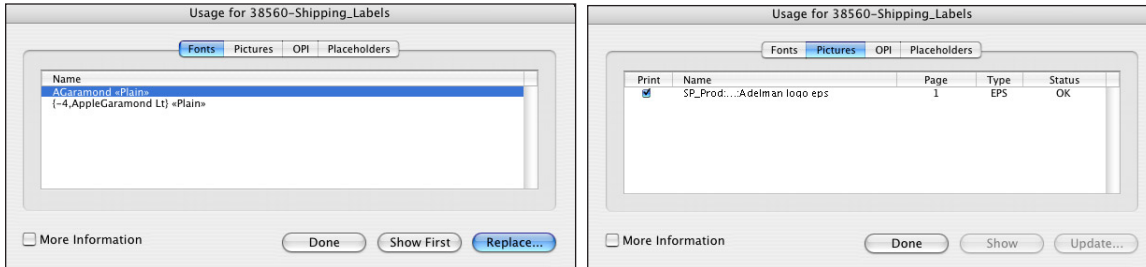
 P41724-Cover_Front.psd

 P41724-Cover_Front.tif

Layout Application Fonts & Images

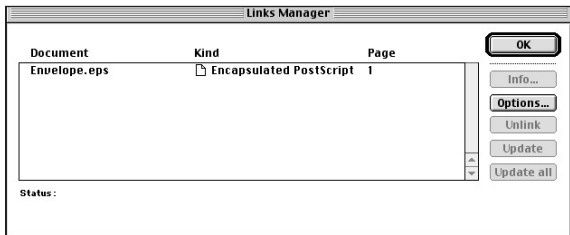
Quark XPress

Utilities — Usage — Fonts or Pictures. Activate any missing fonts through Suitcase. Using the fonts supplied by the customer, when applicable. Update any modified or missing images by clicking on Update and then navigating to the desired image. Choose the image desired and click open.



Adobe PageMaker

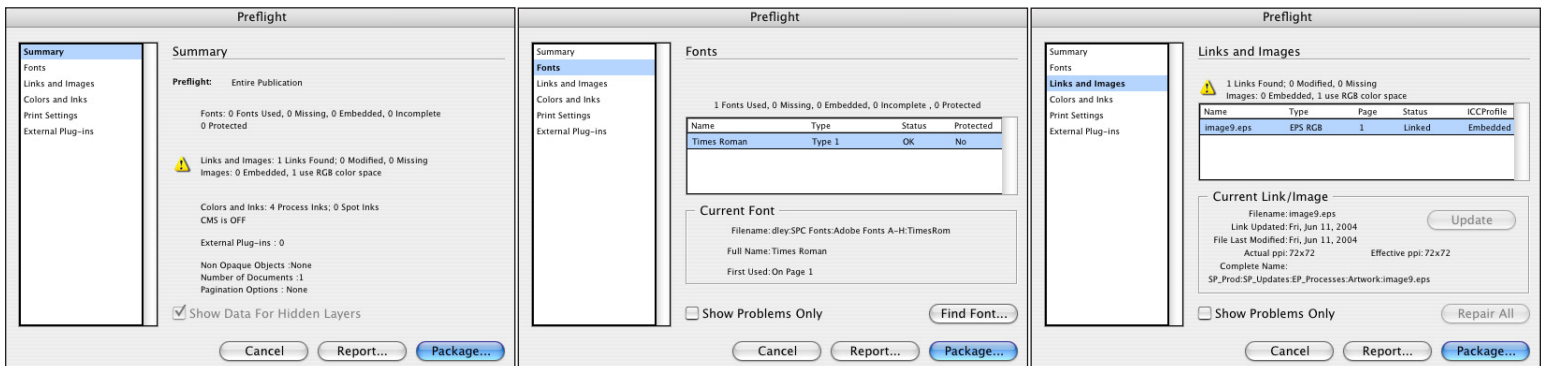
Missing fonts will be flagged when you open your file. Activate any missing fonts through Suitcase. Using the fonts supplied by the customer, when applicable. The status of the images can be located under File — Links Manager. Update any modified or missing images by clicking on Update and then navigating to the desired image. Choose the image desired and click open.



Adobe InDesign

Window — Links (This will show you the images that are linked to the file.)

File — Preflight (This will inform you which fonts and images are used and what their status is.) Update any modified or missing images by clicking on Update and then navigating to the desired image. Choose the image desired and click open. **There is another way to update your links... see "Adobe Illustrator".*

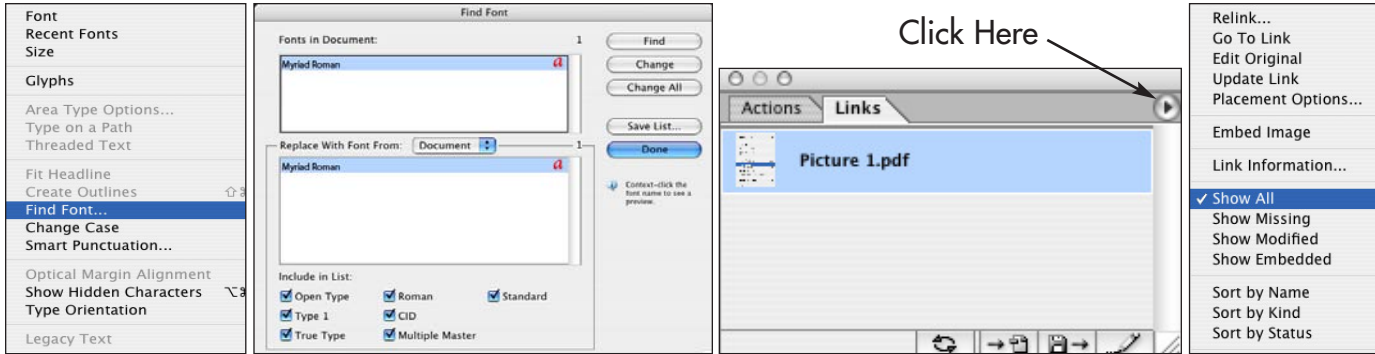


Layout Application Fonts & Images

Adobe Illustrator

Window — Links (This will show you the images that are linked to the file.)

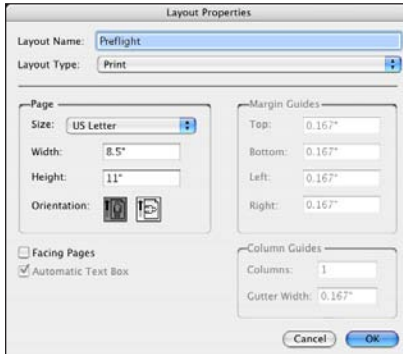
Click on the arrow in the upper right corner of the window (This will inform you which images are used and what their status is.) Update any modified or missing images by clicking on Update Link and then navigating to the desired image. Choose the image desired and click open.



Document Size

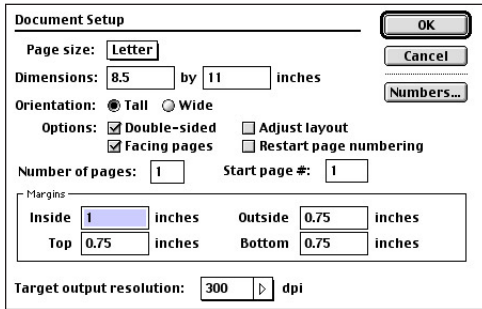
Quark XPress

Layout — Layout Properties (Change the name of the layout if necessary. If you are going to use multiple layouts in one quark document, please label each layout clearly)



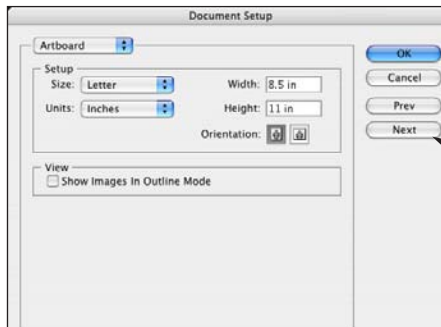
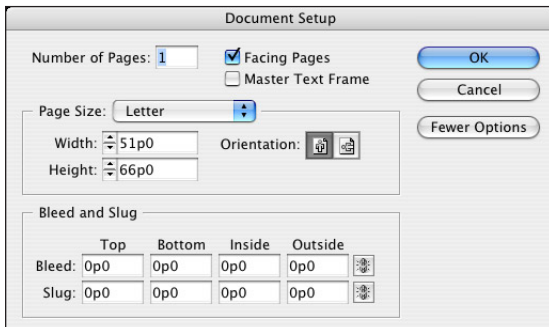
Adobe PageMaker

File — Document Setup



Adobe InDesign / Illustrator

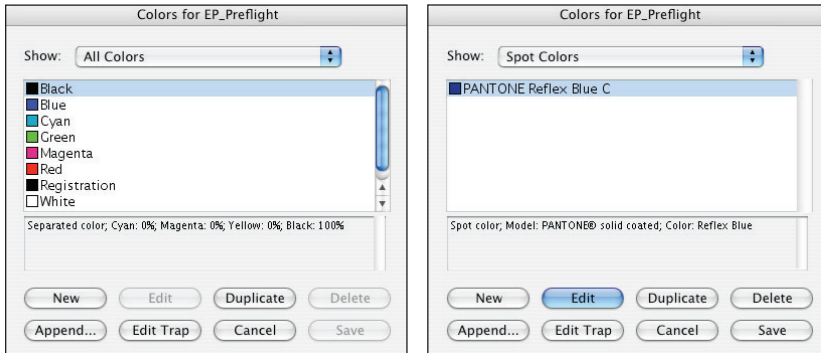
File — Document Setup (Illustrator has several windows. Use the next and Prev buttons to page through all of the settings.)



Checking Colors

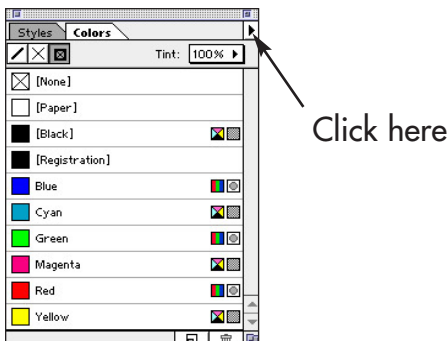
Quark XPress

Edit — Colors (Change any spot colors that do not belong in the job to process, or delete them if they are not used.) If spot colors are used, but should be in CMYK, be aware that ApogeeX has a different conversion than most applications do. This can cause color matching problems.



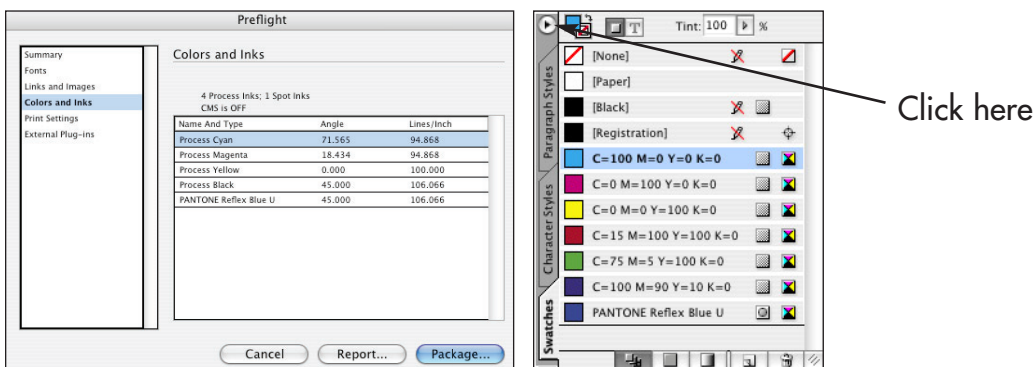
Adobe PageMaker

Window — Color — Double click a color, or click on the arrow in the upper right corner of the window



Adobe InDesign

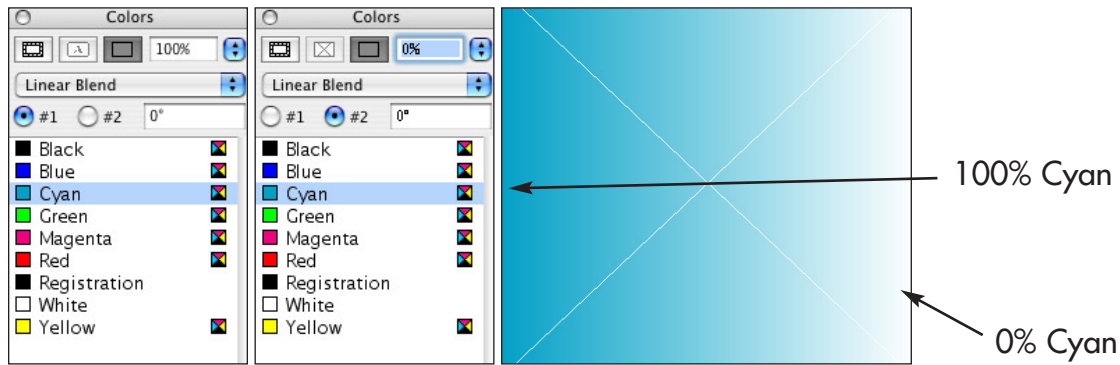
File — Preflight — Colors and Inks (Change any spot colors that do not belong in the job to process, or delete them if they are not used.) Window — Color — Double click a color, or click on the arrow in the upper left corner of the window



Gradients

Quark XPress

In the Color Palette choose 100% Color and 0% of the same Color.

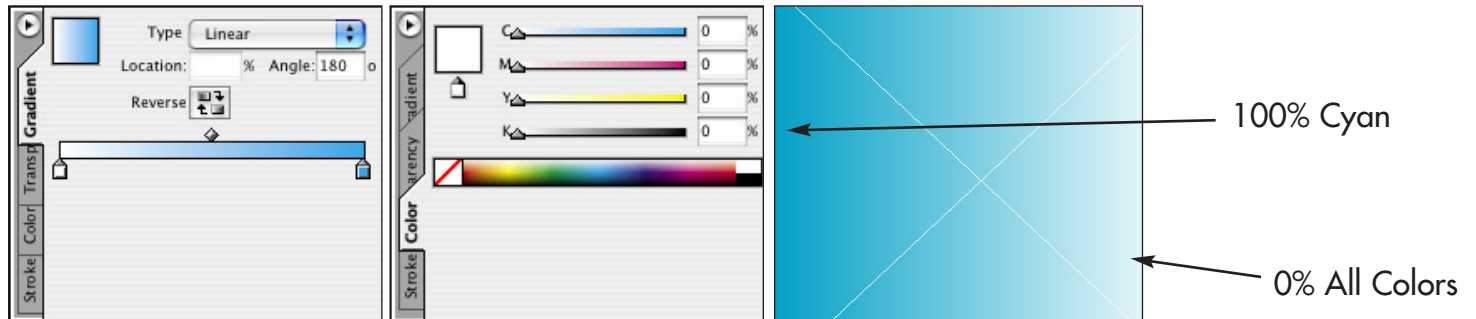


Adobe PageMaker

No Gradients

Adobe InDesign

In the Color Palette choose 100% Color and 0% of every Color.

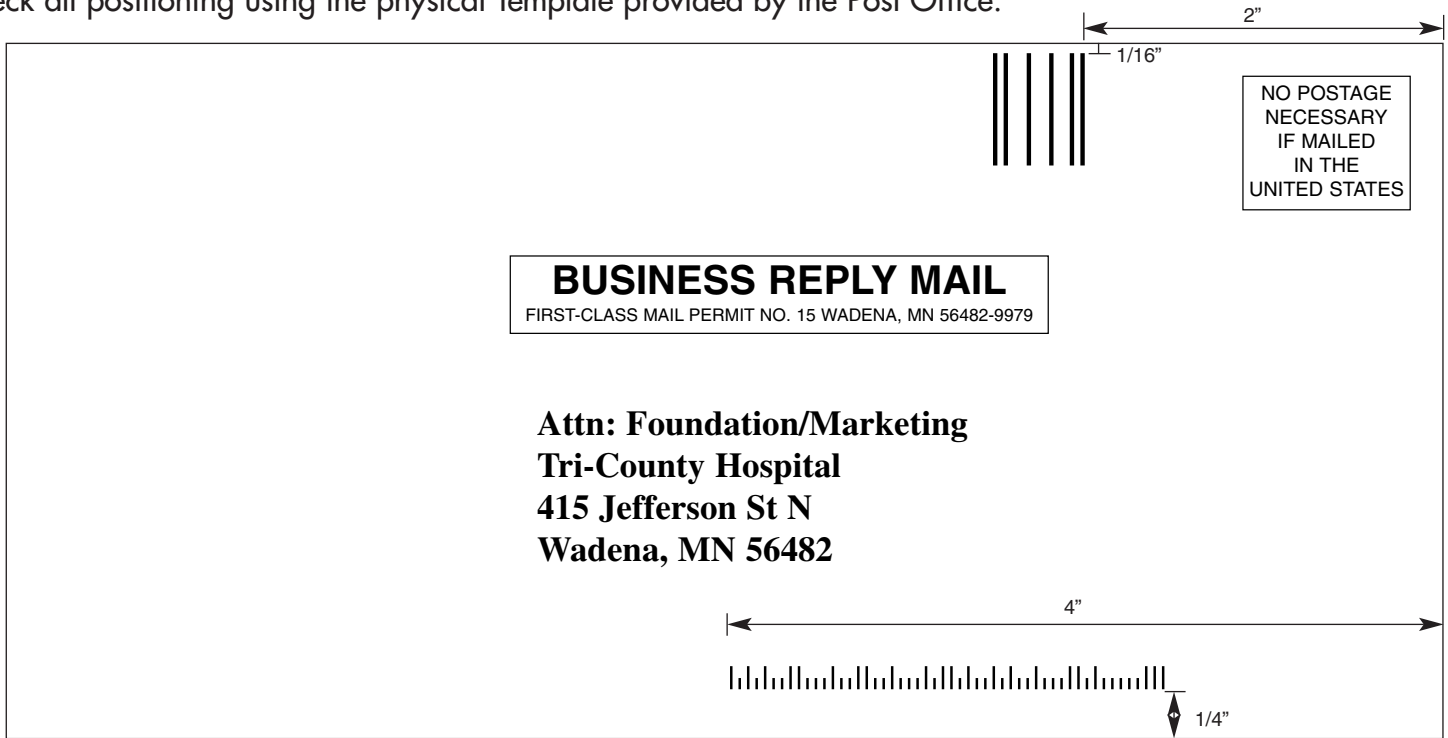


Adobe Illustrator

In the Color Palette choose 100% Color; Illustrator's default is 0% Black, so it is OK as is for 4 Color.

Postal Specs, Indicia's, & FPO

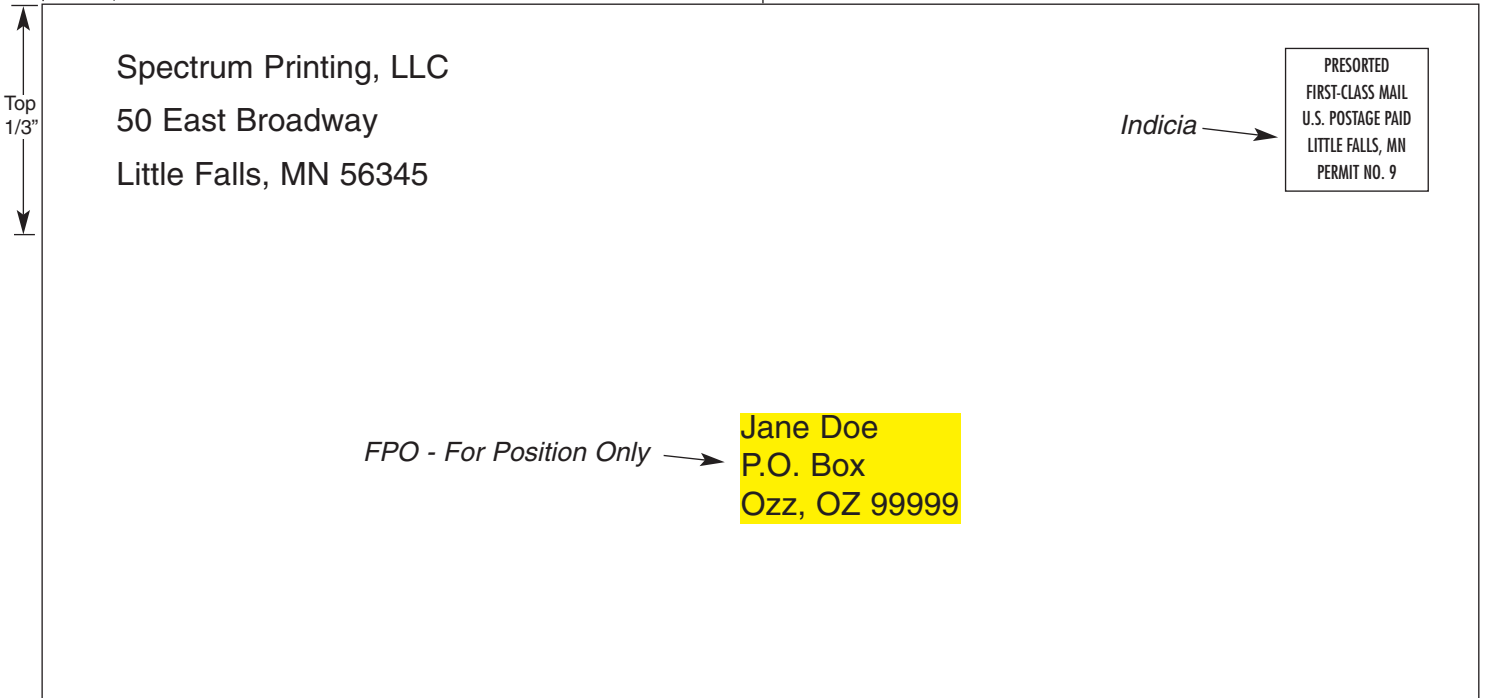
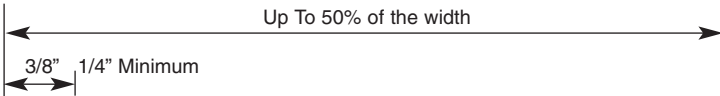
Postal Specs: Positioning for Bar Codes & FIM Codes is critical to the Post Office for mailing. Please double check all positioning using the physical Template provided by the Post Office.



BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 15 WADENA, MN 56482-9979

**Attn: Foundation/Marketing
Tri-County Hospital
415 Jefferson St N
Wadena, MN 56482**

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



Spectrum Printing, LLC
50 East Broadway
Little Falls, MN 56345

Indicia →

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
LITTLE FALLS, MN
PERMIT NO. 9

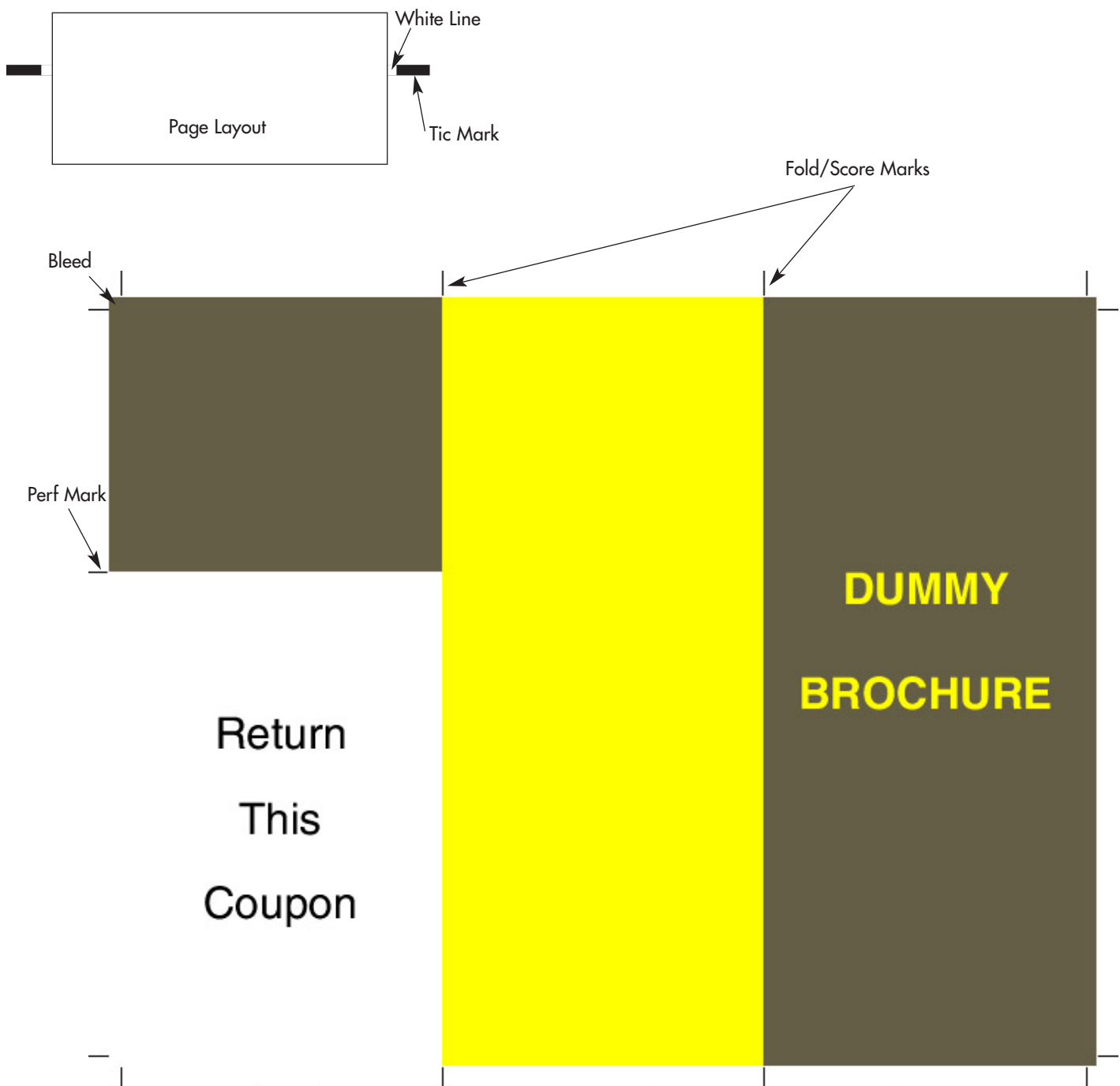
FPO - For Position Only → **Jane Doe
P.O. Box
Ozz, OZ 99999**

Indicia's & FPO: Size and positioning for the indicia isn't as critical as the positioning for FIM Codes and Bar Codes, but the font needs to be clear and the Permit number must be provided when necessary. FPO (For Positioning Only) is usually used to show die cuts and laser imprinting. FPO should be included and clearly marked during the proofing stage. Any FPO content must be suppressed during output so it does not print.

Bleeds, Perfs, Scores, & Folds

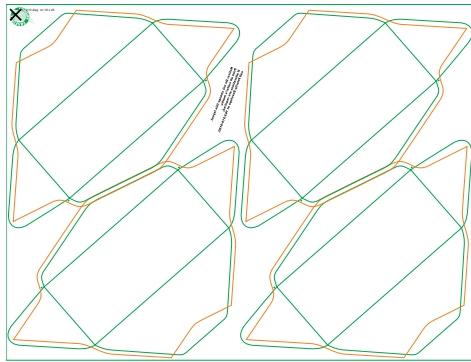
Bleeds: All bleeds should be 1/8" (.125) if possible. If there is only 1/16" (.0625) or less, contact a production manager to have it approved. In most cases it isn't an issue.

Perfs, Scores, & Folds: Positioning for these Bindery Operations should be as precise as possible. Measure in your application to verify that all positions are correct and that they match the Job Ticket measurements. If a position is off by 1/16" or more, if adjusting any positions will become very timely or cause reflow and design issues, contact Customer Service before proceeding. Tic Marks should be added on the outside of the piece to indicate the position of each operation. These Tic Marks should be shown on the outside of the bleed area, even if there is not bleed present. Tic Marks should be created using one line across the entire page. The line should be knocked out behind any objects that are printing. This can be accomplished by placing a white line or box directly above the Tic Mark. Both lines should then be sent to the back.

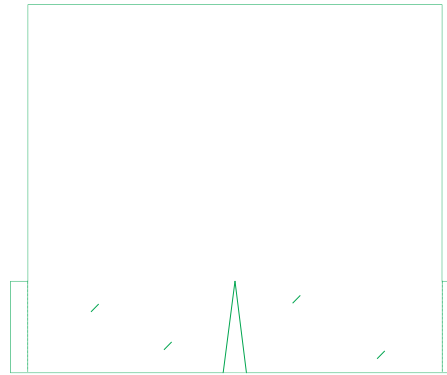


Check Dieline & Imprint Positions

Dielines: A dieline needs to be created if there are any special cuts that need to be done to a job. Many outsource companies have standing dielines, so it is best to contact the vendor before creating your own dieline. Dielines should be setup as its own color called Dieline. A dieline should represent all cuts that are involved with the job, including business card slits and flaps. If the outsource vendor requires an electronic dieline, an Illustrator .ai file should be emailed directly to the vendor. *See EP_Outsource for more information about saving files for a specific vendor*

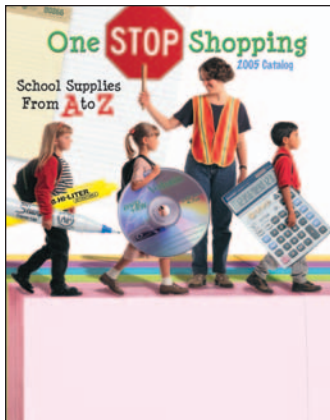


#10 Envelope Dieline
(25x19 4up)

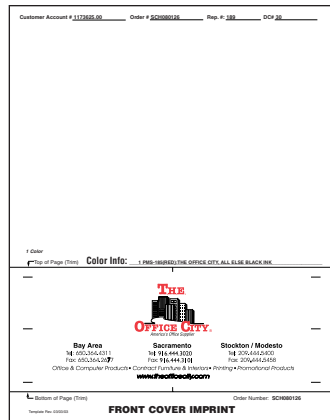


9x12 Folder Dieline

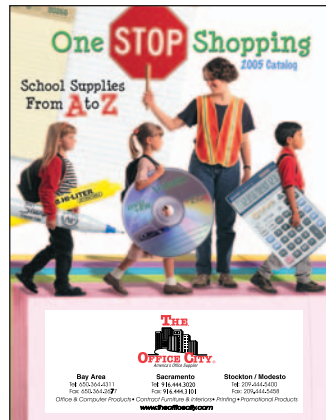
Imprint: Imprints are typically logos or mailing addresses that get printed onto a piece that has already been printed (Pre Print or Master). It is very important to have the size and positioning to be as accurate as possible to assure that the finished piece meets all mailing and customer specs. Varnish and Aqueous coating can cause problems with allowing the paper to accept the ink, therefore varnishing and coating should be done after imprinting. Imprints are usually printed in black ink (the color can be called Imprint for organization reasons), but can be done in multiple colors as well.



Master (Pre Printed Piece)



Imprint



Final

Type Changes, Reflow, Spell Check

Type Changes: Make any type changes or spelling corrections indicated on the customer supplied hard copy, previous sample, or special instructions area on the job ticket.

Reflow: Check the file on screen carefully to make sure that fonts appear to be the same as the provided hard copy and that the text is flowing exactly the same. If type changes have been made, make sure that the new reflow is pleasing to the eye and that it hasn't caused other text to disappear.

Spell Check: It is very important to run spell check in any document that you are working on. Obvious spelling errors could have been missed in the passed that should be corrected. Designers often times overlook this simple step. Running spell check also aids the Proof Reader and helps limit missed errors.

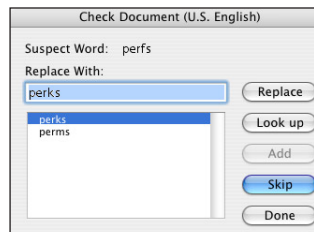
Quark: Utilities — Check Spelling

InDesign: Edit — Check Spelling

Illustrator: Edit — Check Spelling

Photoshop: Edit — Check Spelling

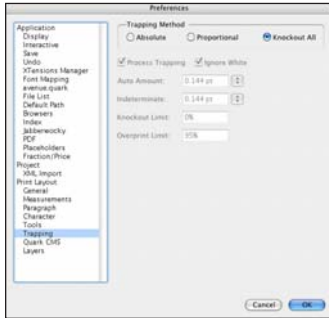
PageMaker: Utilities — Spelling



Trapping

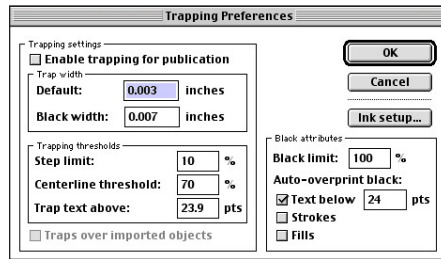
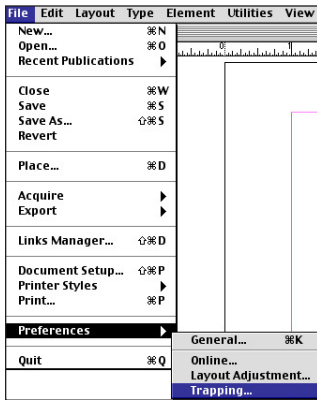
Quark XPress

Quark XPress — Preferences — Trapping. Change the setting to Knockout All.



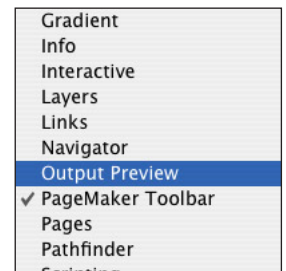
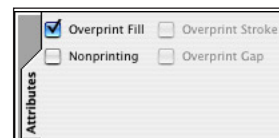
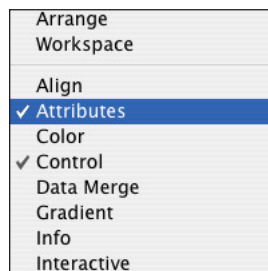
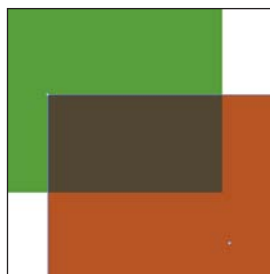
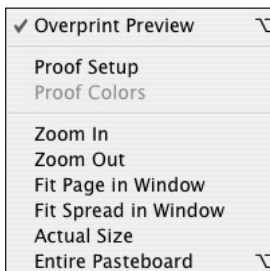
Adobe PageMaker

File — Preferences — Trapping. Make sure that “Enable trapping for publication” is not checked.



Adobe InDesign

View — Overprint Preview (This will show you if there are issues with colors overprinting each other that shouldn't) Window — Attributes (This will allow you to choose to overprint a fill or a stroke or to remove the overprint) Window — Output Preview — Flattener or Separations (This is a good way to double check the file)

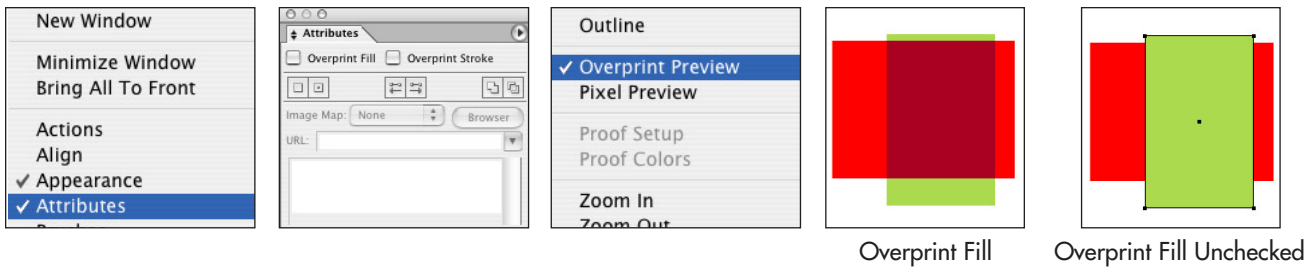


Overprint Fill

Trapping

Adobe Illustrator

View — Overprint Preview (This will show you if there are issues with colors overprinting each other that shouldn't) Window — Attributes (This will allow you to choose to overprint/knockout a fill or a stroke.)



Adobe Acrobat (Pitstop)

Make sure that Overprint Preview is checked under Advanced (This will show you if there are issues with colors overprinting each other that shouldn't) Window — Show Pitstop Inspector — Prepress — Overprint (This will allow you to choose to overprint/knockout a fill or a stroke.)



Check Image Format, Resolution, Density, & Color

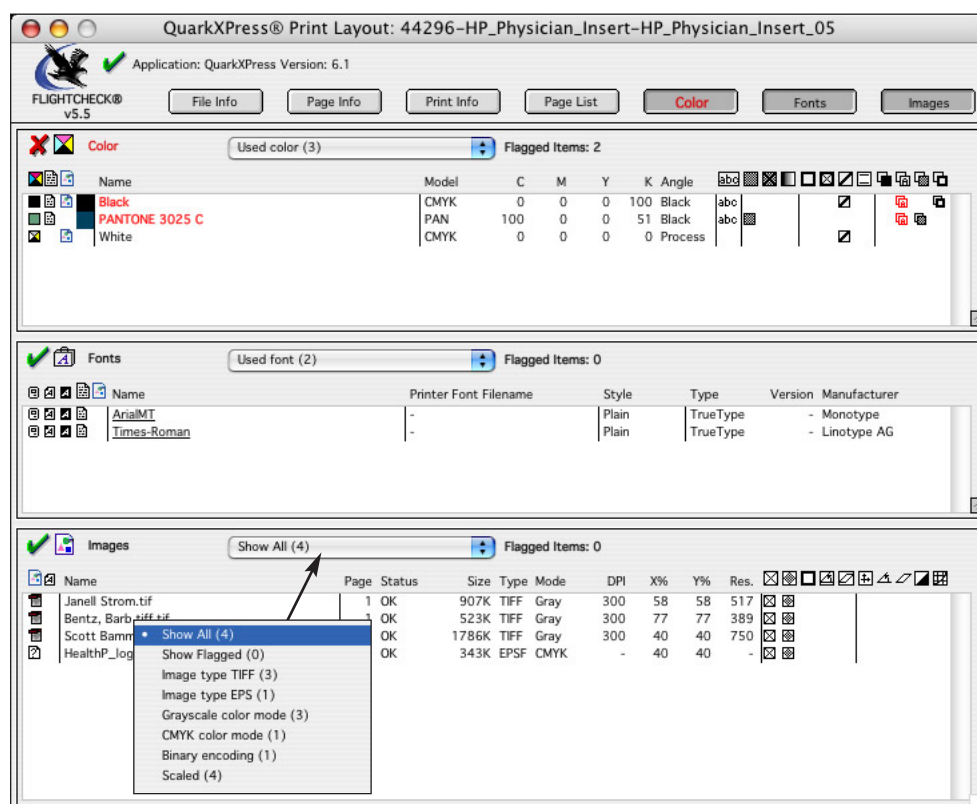
All These Can Be Determined By Flightcheck. These elements can also be determined by the application the artwork is relative to.

Things To Look For:

- Image Density is around 300%
- Resolution close to or higher than 300dpi
- All images are TIF, or EPS
- All images are Gray, CMYK, or Duotone
- All font elements are OK

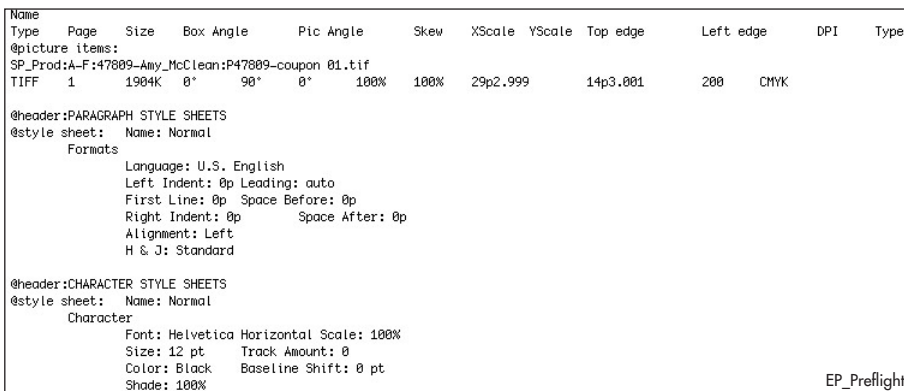
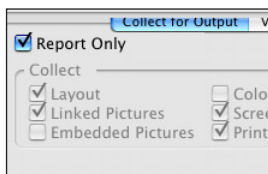
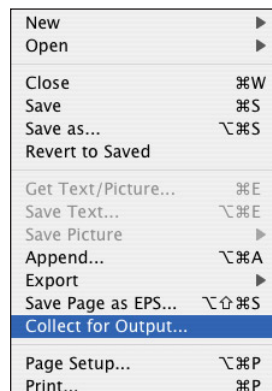
Flightcheck

Drag your working file (Application or image file) onto Flightcheck. This application will show everything you need to know.



Quark

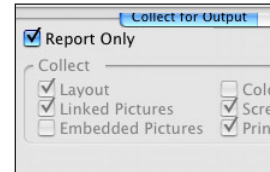
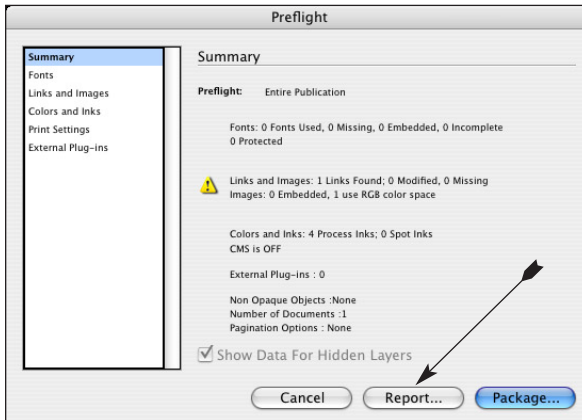
File — Collect for Output — Report Only — Save to Desktop. This report will list images and fonts and the attributes for each. tiff, cmyk, etc.



Check Image Format, Resolution, Density, & Color

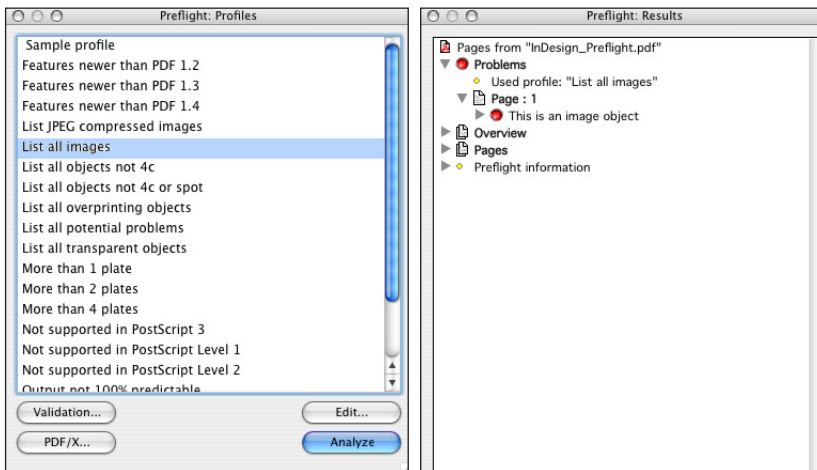
InDesign

File — Preflight. This will show what fonts are used, missing, etc. It will also show the status of the links (artwork). Click on the **Report** button to save a complete overview of the file (very similar to Quark's report).



Acrobat / Pitstop

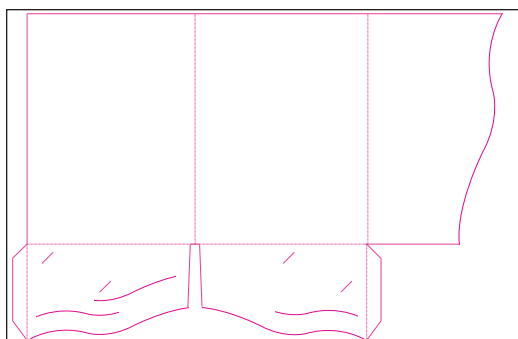
Document — Preflight — Choose a profile to check. Click on **Analyze**. This will show the attributes of the desired element.



Preparing Dielines & Varnish

Dielines: If a dieline is necessary for a job, a dieline file should be created or saved separately from the working file. The dieline color should be in Green (100% Cyan & 100% Yellow), saved as a spot color, and named "Dieline". It is also OK to have the dieline in Magenta or even White depending on the color of the working file, but it still needs to be named "Dieline" and it needs to be a spot color. The dieline can be left on the actual working file, but the entire dieline must be suppressed when printing to Apogee X. The dieline file should then be sent separately to Apogee X for proofing. This allows plating to print the dieline as an overlay to check positioning on the printing piece.

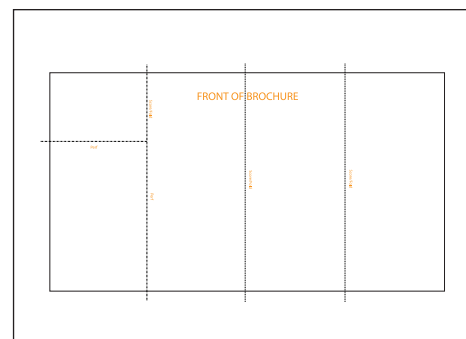
Sending a Dieline to Outsource Companies: We have standing dieline files from every vendor that we use for printing envelopes and a standard 9x12 folder dieline file. If a dieline is not a standard Folder (9x12/w business cards slits or without, etc.) or a standard Envelope (#9, #10, etc.), a dieline file must be sent to the outsource vendor. Most vendors require an Illustrator (ai) file version 8 or older. All dielines that are being outsourced should indicate what type of cut or procedure each line represents (see picture below). It is also very helpful to send a PDF of the printing file, so the vendor knows what they will be receiving. Dielines should be emailed a couple days ahead of time to allow the vendor time to create the die. (also see EP_Outsource procedures)



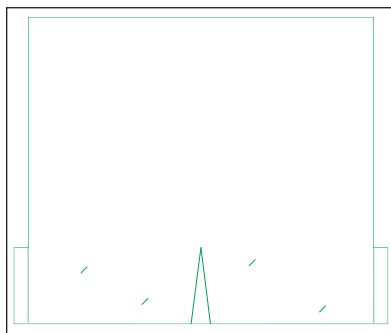
Custom 9x12 Folder Dieline



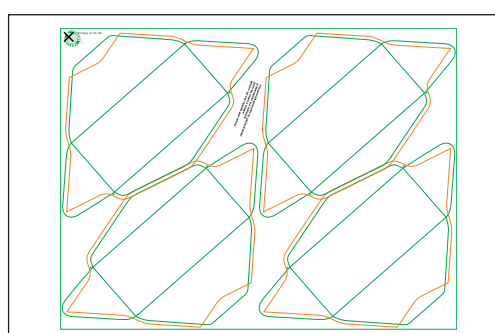
Custom 9x12 Folder (PDF to Vendor)



Custom Dieline (ai file to Vendor)



Standard 9x12 Folder with Business Card Slits (Both Pockets)



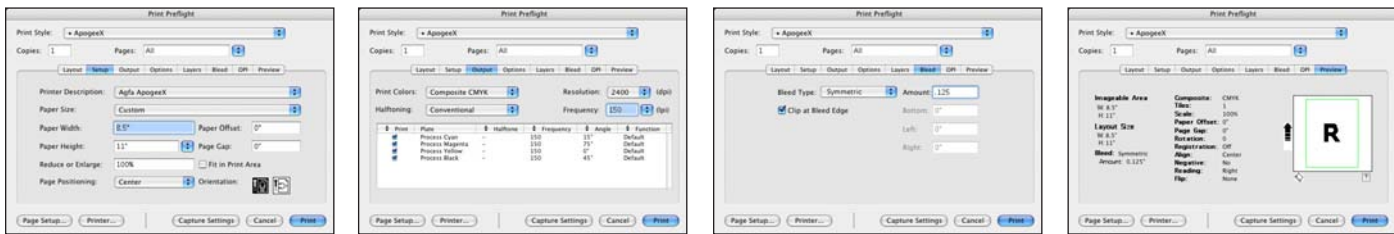
Standard #10 Envelope Dieline 4up

Sending The Job To ApogeeX

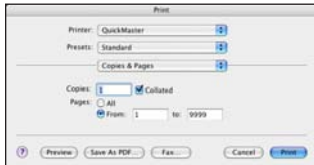
Follow the job ticket to determine the jobs run size, finished size, folded size, and which press the job will be running on. Be very thorough on reading all pages and elements of the job ticket. The cover of a book may run on a different press, therefore the cover pages need to be sent separately from the guts.

- Choose ApogeeX for the Print Style
- Choose custom for the paper/page size and enter the file size (avoid changing the orientation)
- Composite CMYK should be used, unless there are Duotone or DCS issues in ApogeeX. If there are issues, DeviceN can be used. If there is a Duotone in the file, the screen angle of one of the spot colors needs to be changed. Resolution should be 2400 and Linescreen is 150.
- Set the bleed amount to .125" unless you are including perf or fold marks, then the bleed should be .25"
- Check your preview to make sure that your file looks correct.
- Choose the desired press or PDF option (Envelope — Copier_Jobs — HI Res PDF — QuickMaster — Sakuri — SoftProof — SoftProof_BW — SpeedMaster — SpeedMaster_NP) *Note: softproofs should only be used as proofs*
- Print

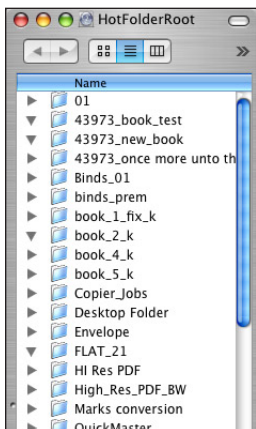
Quark XPress example



Choose ApogeeX for the Print Style

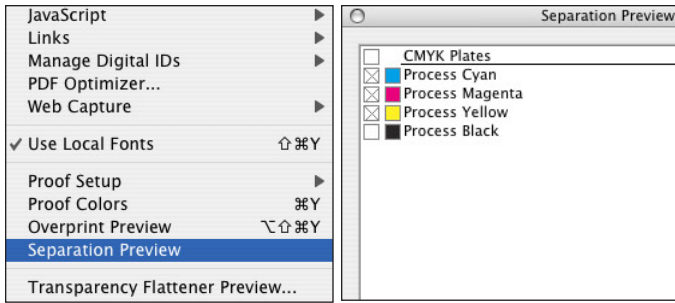


PDF workflow: If a customer supplied a PDF file, a Hi Res PDF was made in order to easily combine multiple layout files, or a Microsoft file was supplied, A PDF file, or a Postscript file may be dropped into a hot folder. The HotFolderRoot has a Hot Folder for every standard workflow/press. Simply drag your file to the designated folder.

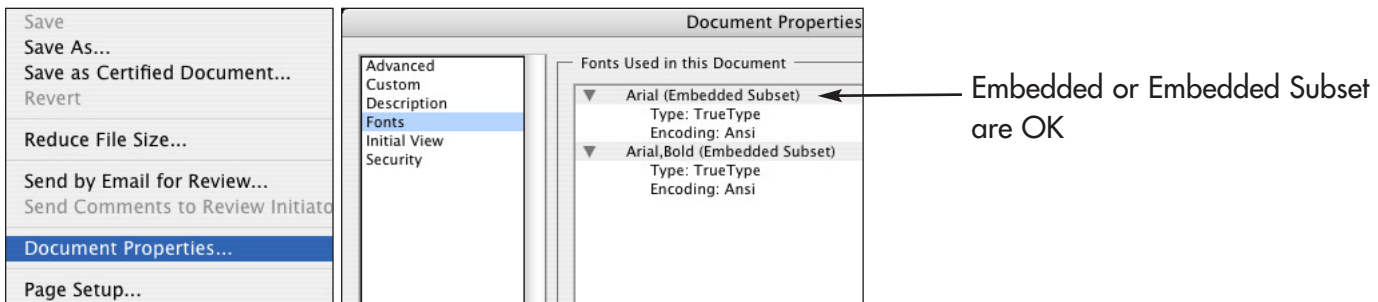


PDF Preflight

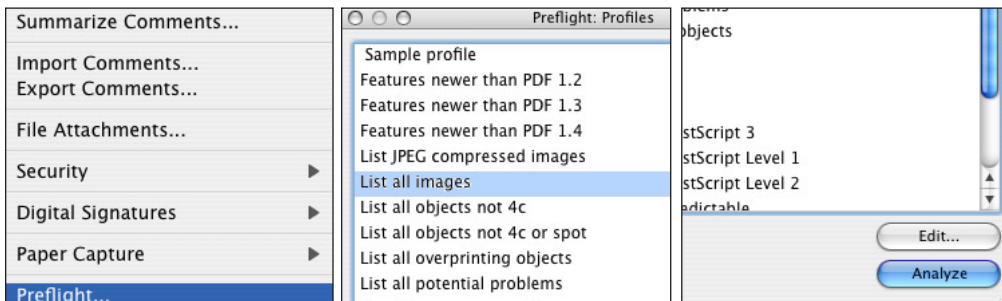
1. Check the Separations to make sure that the colors are breaking out correctly according to the job ticket. Advanced — Separation Preview. Overprint Preview should also be checked on at all times.



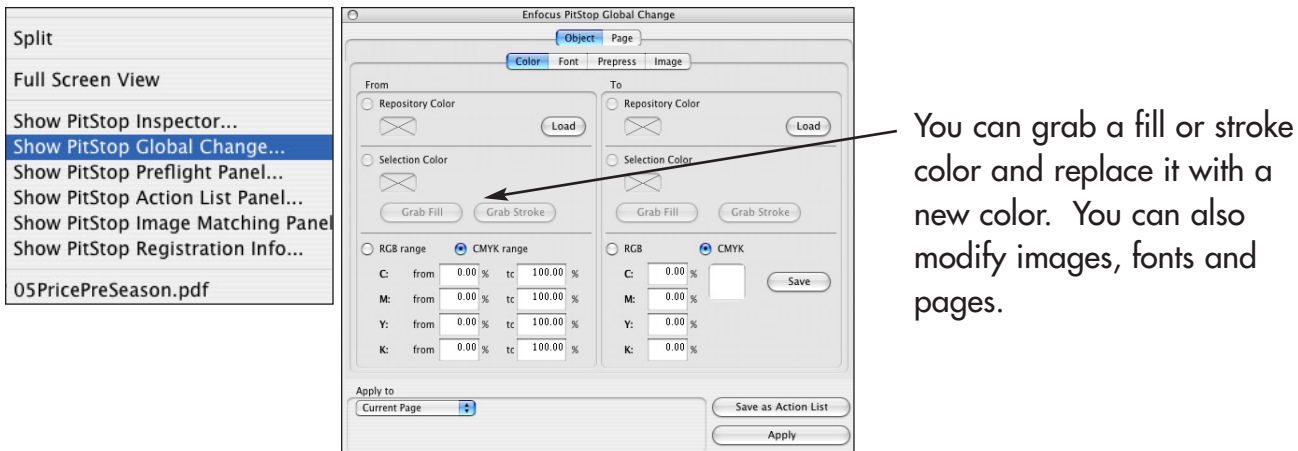
2. Make sure that the fonts are embedded properly. File — Document Properties — Fonts. If the fonts are not embedded the file will not go through ApogeeX. A new PDF should be supplied by the customer with the fonts properly embedded. To correct the problem save the PDF as a Postscript file and create a new PDF.



3. Basic Preflight: Documents — Preflight — Click on a profile that you wish to check — Click on Analyze



4. Modifying Contents Through Global Change/Inspector: Window — Show Pitstop Global Change



EP Measurements

.0156	1/64	.0312	1/32
.0625	1/16	1.586	4.517
.0937	3/32	2.381	6.775
.125	1/8	3.175	9.034
.1563	5/32	3.969	11.292
.1875	3/16	4.763	13.551
.2187	7/32	5.556	15.809
.25	1/4	6.350	18.068
.2812	9/32	7.144	20.326
.3125	5/16	7.938	22.584
.3437	11/32	8.731	24.843
.375	3/8	9.525	27.101
.4062	13/32	10.319	29.360
.4375	7/16	11.113	31.618
.4687	15/32	11.906	33.877
.5	1/2	12.700	36.135
.5312	17/32	13.494	38.393
.5625	9/16	14.288	40.652
.5937	19/32	15.081	42.910
.625	5/8	15.875	45.169
.6563	21/32	16.669	47.427
.7187	23/32	18.256	51.944
.75	3/4	19.050	54.203
.7813	25/32	19.844	56.461
.8125	13/16	21.638	58.719
.8438	27/32	21.431	60.978
.875	7/8	22.225	63.236
.9063	29/32	23.019	65.495
.9375	15/16	23.813	67.753
.9688	31/32	24.606	70.012
1.000	1	25.400	72.270

EP Measurements

.0156	1/64	.0312	1/32
.0625	1/16	1.586	4.517
.0937	3/32	2.381	6.775
.125	1/8	3.175	9.034
.1563	5/32	3.969	11.292
.1875	3/16	4.763	13.551
.2187	7/32	5.556	15.809
.25	1/4	6.350	18.068
.2812	9/32	7.144	20.326
.3125	5/16	7.938	22.584
.3437	11/32	8.731	24.843
.375	3/8	9.525	27.101
.4062	13/32	10.319	29.360
.4375	7/16	11.113	31.618
.4687	15/32	11.906	33.877
.5	1/2	12.700	36.135
.5312	17/32	13.494	38.393
.5625	9/16	14.288	40.652
.5937	19/32	15.081	42.910
.625	5/8	15.875	45.169
.6563	21/32	16.669	47.427
.7187	23/32	18.256	51.944
.75	3/4	19.050	54.203
.7813	25/32	19.844	56.461
.8125	13/16	21.638	58.719
.8438	27/32	21.431	60.978
.875	7/8	22.225	63.236
.9063	29/32	23.019	65.495
.9375	15/16	23.813	67.753
.9688	31/32	24.606	70.012
1.000	1	25.400	72.270

CS Proofing

All files need to be proofed either internally or by the customer.

If any changes have been made to a file, or the customer has requested that we check their files for typos, it MUST go through Proof Reading before a proof is sent out, and before the job can be continued. If any changes are to be made, the job must be proof read AGAIN, to make sure that all the changes have been made.

After the job has been proof read and content has been checked thoroughly, you may proceed in sending a proof.

Any design job that is set up as a template for a business card etc., indicate that on the proof. Another proof should be sent once the personal information is added to the job.

PDF Proofs

Proof the PDF carefully and thoroughly on your screen (Compare it to the customer supplied print out, or the last sample that was proof read).

Send the proof via email to the Customer. Attach the PDF file and the Proofing template in your Mail program (If it is not already present). In the Subject line, put the persons name and indicate that you are sending a proof. *Example: Attn: Mary Proof of Newsletter.* Include any special notes or questions regarding the files or proofs. Include the date in which the proof needs to be returned.

When the proof is returned by the customer, make sure that it is clearly indicated (Changes, Approved As Is, etc.) After the proof is OK'd and no changes need to be made, please write "Final" on the most recent printed proof located in the ticket. Print out a copy of the replied email to show the customers approval to print. Place the email in the ticket for reference. It is also a good idea to write Cust. OK on the job jacket under Original Proof. *Example: #3 Final.*

Color Copy / B&W Laser Proofs

Print out a proof to the designated printer. Compare the proof to the customer supplied copy or to the last proof read copy to assure nothing has accidentally changed that wasn't supposed to. Make sure that the proof is stamped with the SPECTRUM PROOF stamp and labeled #1, or #2, etc. If everything is OK, the customer can be contacted to check the proof.

When the proof is returned by the customer, make sure that it is clearly marked (Changes, Approved As Is, etc.) After the proof is OK'd and no changes need to be made, please write "Final" on the most recent printed proof located in the ticket. It is also a good idea to write Cust. OK on the job jacket under Original Proof. *Example: #3 Final.*

Faxed Proofs

Compare the proof to the customer supplied copy or to the last proof read copy to assure nothing has accidentally changed that wasn't supposed to. Make sure that the proof is stamped with the SPECTRUM PROOF stamp and labeled #1, or #2, etc. Fax the proof to the designated customer, including a Fax Cover sheet with all the necessary info.

When the proof is returned by the customer, make sure that it is clearly marked (Changes, Approved As Is, etc.) After the proof is OK'd and no changes need to be made, please write "Final" on the most recent printed proof located in the ticket. It is also a good idea to write Cust. OK on the job jacket under Original Proof. Place the returned fax cover sheet and proof in the job ticket for reference. *Example: #3 Final.*

Digital Blueline/Contract Proofs

Usually these proofs will be sent out by shipping. If you would like to personally deliver a proof or the customer is coming to pick it up, make sure that is indicated clearly on the ticket! Compare the proof to the customer supplied copy or to the proof marked Final to assure nothing has accidentally changed that wasn't supposed to (Usually the job will be proofed prior to a Blueline or a Contract proof).

When the proof is returned by the customer, make sure that it is clearly marked (Changes, Approved As Is, etc.) After the proof is OK'd or changes need to be made, return the job to the PrePress Operator. It is also a good idea to write Cust. OK on the job jacket under Original Proof. *Example: #3 Final.*

After a Final OK, the job must be passed along to the PrePress or Plating areas ASAP.

EP Proofing

All files need to be proofed either internally or by the customer.

If any changes have been made to a file, or the customer has requested that we check their files for typos, it MUST go through Proof Reading before a proof is sent out, and before the job can be continued. If any changes are to be made, the job must be proof read AGAIN, to make sure that all the changes have been made.

After the job has been proof read and content has been checked thoroughly, you may proceed in sending a proof... The ticket should state a proof due date and the type of proof that is needed. If this info is not supplied, contact the CS Representative.

Any design job that is set up as a template for a business card etc., indicate that on the proof. Another proof should be sent once the personal information is added to the job.

PDF Proofs

Create a soft proof by printing your file to the ApogeeX SoftProof channel.

Proof the PDF carefully and thoroughly on your screen (Compare it to the customer supplied print out, or the last sample that was proof read). Print out a laser copy to keep with the ticket. Stamp it with the SPECTRUM PROOF stamp and label it proof #1, or #2, etc.

Send the proof via email to the designated CS Representative (They will forward it to the customer). Attach the PDF file and the Proofing template in your Mail program. If CS requests that you send the proof, follow these steps: Send the proof to the customer via email. The email address and contact name should be on the ticket, if it is not, contact CS. In the Subject line, put the persons name and indicate that you are sending a proof. *Example:* Attn: Mary Proof of Newsletter. Include any special notes or questions regarding the files or proofs. Include the date in which the proof needs to be returned. Cc: customer service when sending out any proofs. Cc: customer service when the customer reply's about a proof.

After the proof is OK'd... Print out a final laser copy if there were any final changes made (There should be a laser for every proof that was sent). Stamp the proof with the SPECTRUM PROOF stamp and label it proof # and write Final. *Example:* #3 Final. Put a print out of the final customer OK in the ticket.

Color Copy / B&W Laser Proofs

Print out a proof to the designated printer. Compare the print out to the customer supplied copy or to the last proof read copy to assure nothing has accidentally changed that wasn't supposed to be. Stamp it with the SPECTRUM PROOF stamp and label it proof #1, or #2, etc. Place the proof in the ticket, and send the entire job jacket back to CS.

After the proof is OK'd... Print out a final laser copy if there were any final changes made (There should be a laser for every proof that was sent). Stamp the proof with the SPECTRUM PROOF stamp and label it proof # and write Final.

Faxed Proofs

Print out a B/W proof. Compare the print out to the customer supplied copy or to the last proof read copy to assure nothing has accidentally changed that wasn't supposed to. Stamp it with the SPECTRUM PROOF stamp and label it proof #1, or #2, etc. Fax the proof to the designated customer, including a Fax Cover sheet with all the necessary info. If the contact info. is not on the ticket, contact CS.

After the proof is OK'd... Print out a final laser copy if there were any final changes made (There should be a laser for every proof that was sent). Stamp the proof with the SPECTRUM PROOF stamp and label it proof # and write Final.

Digital Blueline/Contract Proofs

Print out a Blueline or a Contract proof through the ApogeeX workflow (A Contract proof should ONLY be made if the job is in 4 to 6 colors; if this is so, the file must be put into the Speedmaster workflow). Compare the print out to the customer supplied copy or to the proof marked Final to assure nothing has accidentally changed that wasn't supposed to (Usually the job will be proofed prior to a Blueline or a Contract proof). Place a Proof Slip sticker on the proof and fill out the required info. Give the job to Shipping and they will send the proof out. Shipping should return the ticket to you or to CS. If the contact info. is not on the ticket, contact CS.

After a Final OK, the job may be continued to the plating or printing stage. There should be a copy of the final customer OK in the ticket.

EP Proof Reading

1. Thoroughly read over the job ticket.
2. Read content for spelling and punctuation errors, etc., only when we have typeset the job, made type changes, or the customer has requested us to proof read.
3. Make sure that everything matches the job ticket description.
4. Compare the proof to a customer supplied hard copy, checking for reflow, font changes, image shifts, etc.
5. If any changes need to be made, return the proof to the designer with the needed changes indicated.
6. Once the proof is correct, make sure the job # & date are on it. Double check that the appropriate stamp(s) and proof number are on the proof. Sign off on the job jacket and return the entire job jacket to the CS representative.
7. Trace around the proof to show the finished size of the piece. Mark and trace up perf position, numbering, folding, scoring, etc. Label pages of a book (1., 2., 3., etc.). If the proof is not faxed, cut it down, back it up and fold it down when necessary.

EP ApogeeX Workflow

1. Read the Job Ticket thoroughly. The Job Ticket must state which press the job is running on, the run size, the finished size, the style of imposition, and any bindery operations that apply to the job. If any information is missing or in question, contact the CS Representative or Job Planning immediately to resolve the issue before continuing the job.
2. If the ApogeeX Servers are not running... Please check with an Administrator (Supervisor) or consult the ApogeeX Server Process.
3. Log onto ApogeeX Servers and Client. Enter your username & password, click Log On.
4. Submit the job to ApogeeX. Drag a High Res. PDF or .PS File onto the designated Hot Folder or Print to the designated workflow through an Appletalk Printer.
5. Check for Preflight messages. Click on the flashing red lights on the bottom left of the screen.
6. Edit the job in ApogeeX. Find the job that you submitted to ApogeeX (The job is located under the workflow that you sent it to). Click on the job to highlight it. Click on the Edit Job button. Change the settings within each Task Processor (T.P.) to achieve your desired output (Color, Imposition, Trapping, etc.)
7. Commit the changes that you have made to the workflow by clicking on the Commit button. Double check that any Preflight warnings have been Acknowledged and fixed. Any red warnings that appear means that your job will not process and the issue must be fixed prior to continuing!
8. Under the Results tab, if your signature is OK to continue, it will turn Blue. At this point, double click on the outer border of this Blue imposition to double check the settings you have chosen for your job. It is also a good way to check your files content. If all looks good, click on the name of your signature (Sig 1 Front) and click on the Thumbs Up button to send your job to print drive. (You must select every signature that you want to send.)
9. Scan the job to Plate in PrintSmith.
10. If there are any issues or concerns... pass the info along to the plater so they are aware of the issue. At this point it is a good idea to view your job in the Preview mode on Print Drive.

EP Shutdown/Start Up the ApogeeX Server

1. *Shutdown* - Make sure no one is in ApogeeX at the time, then bring up the ApogeeX Console and click shutdown. This will close out all the TP's on the bottom of the screen. They should all close and leave just ApogeeX. If any are still active, you will have to close them one by one. Right click on each one and close them. Choose Startup — Shutdown on all three servers, ApogeeX, SAT, & Nas. *(by pushing Control and then Escape, you can switch from one server to the next)*
2. Choose Startup — Shutdown on all three servers, ApogeeX, SAT, & Nas. Choose Planned Maintenance as the reason to shutdown.
3. *Start up* - On the NAS there are 2 buttons on the left. Push the right then the left. You will be able to see that it started up. Then the Sat can be started, then the ApogeeX server can be started.
4. Start by logging onto the NAS. Next log onto the SAT and the ApogeeX server. All systems use *pd* for the username and password.
5. Once the servers are up and running, you can start up ApogeeX Console on ApogeeX. Double click on the black ApogeeX Console icon to start it. If Normalize2, Flatten2, Preflight2, etc. are not active, you must go to the SAT and double click the launcher to bring them on-line.

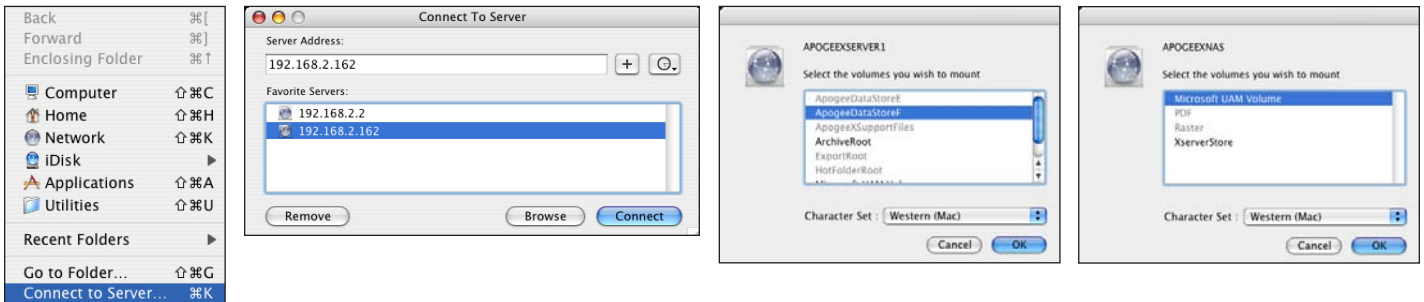
EP ApogeeX Workflow

1. Read the Job Ticket thoroughly.
2. Log onto ApogeeX Servers and Client.
3. Submit the job to ApogeeX.
4. Check for Preflight messages.
5. Edit the job in ApogeeX.
6. Commit the changes
7. Preview the imposition as a PDF. Send the job to printdrive.
8. Scan the job to Plate in PrintSmith.
9. Pass any info along to the plater. so they are aware of the issue.

Log Onto ApogeeX Servers & Clients

ApogeeX Servers: (Mac)

In your finder, in the menu bar choose Go — Connect To Server. Click on or type in 192.168.2.162 if it is not listed and then click Connect. Enter your Username & Password. Next, select HotFolderRoot, & ExportRoot. Click OK. Repeat these steps, but connect to 192.168.2.161 and select PDF & Raster. These icons should now be mounted on your desktop. You may create aliases of these and use shortcuts to connect to these servers.



ApogeeX Clients: (Mac)

Click on the ApogeeX alias in your Doc, or Double Click on the application in your Applications folder. Click on "ApogeeXServer1 192.168.2.262" to highlight it. Enter your User Name & Password and click Log On.

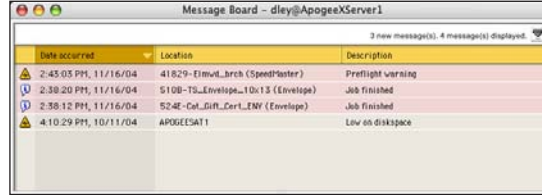
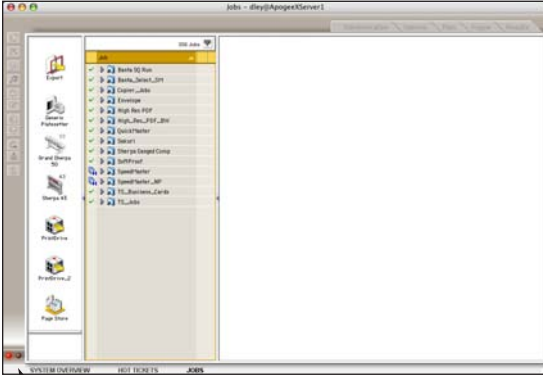


ApogeeX Client: (PC)

Double click on the ApogeeX alias on the Desktop. Click on "ApogeeXServer1 192.168.2.262" to highlight it. Enter *pd* for the User Name & *pd* for the Password and click Log On.

ApogeeX Preflight Messages

Click on the flashing lights to see ALL of the current ApogeeX Messages. If you wish to view the messages that ONLY pertain to your job, click on the Exclamation icon next to your job in the Jobs window. Click on the message that pertains to your job. A brief explanation will appear in the box below. If there is an issue that needs to be fixed, delete the job from Apogee, fix it and re-submit it.

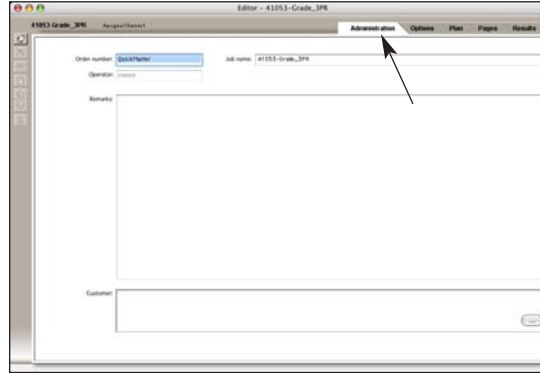
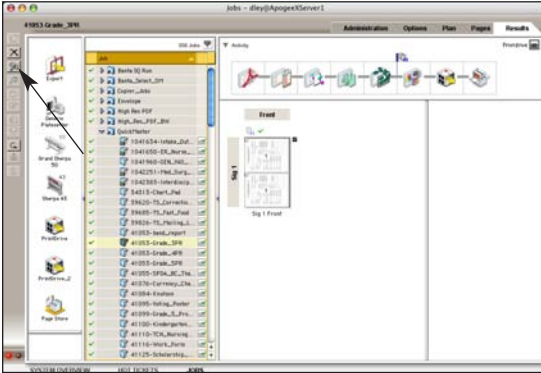


Date occurred	Location	Description
2:45:03 PM, 11/16/04	41829-Timv4_brch (SpeedMaster)	Preflight warning
2:30:20 PM, 11/16/04	510B-TS_Envelope_10:13 (Envelope)	Job finished
2:38:12 PM, 11/16/04	524E-Cat_Gift_Cert_ENF (Envelope)	Job finished
4:10:29 PM, 10/11/04	APOGEE5AT1	Low on disk space

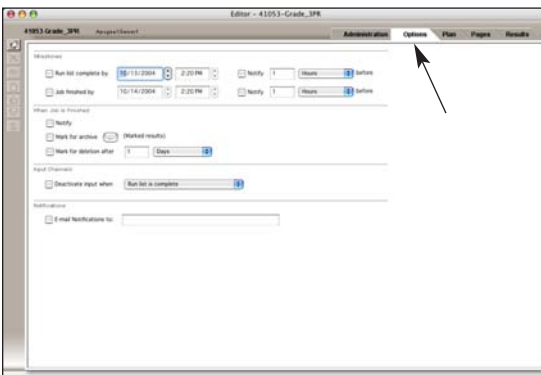
- A yellow icon means that it is a Preflight Warning
- A Red Warning means that there is an issue that must be fixed or addressed and not just Acknowledged

Editing The Job's Workflow

Highlight the desired job and click on the Edit Job button. **Administration Tab:** Under this menu you can change where the job is located by changing the name under Order number:. Example: You can replace Speedmaster with TS Jobs and that will move your job to the TS Jobs folder. You can also change the Job name, add customer remarks, and customer contact information.

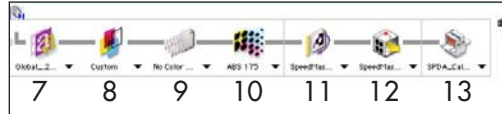
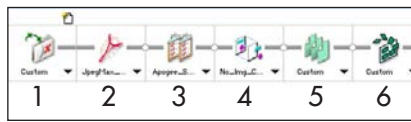
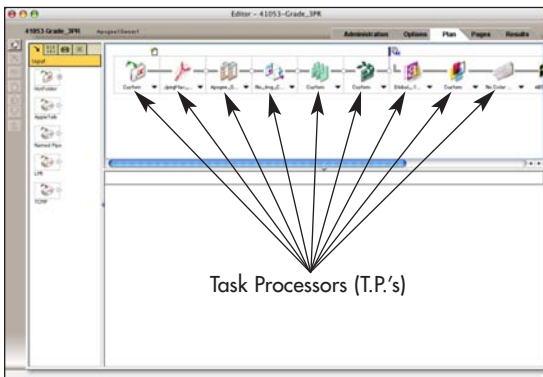


Options Tab: Under this menu you can Mark a job for Archive or Deletion.



Editing The Job's Workflow

Plan Tab: This is where you should modify Task Processors (T.P.'s) to fit your job.



- 1 Hot Ticket/Appletalk Channel
- 2 Normalize
- 3 Preflight
- 4 Flattening
- 5 Runlist
- 6 Impose
- 7 Render - Trap
- 8 Render - Separate
- 9 Render - Render
- 10 Render - Screen
- 11-13 Printdrive & Press

Hot Folder: The first T.P. (Hot Ticket/Appletalk Channel) represents how the job was or could be submitted to ApogeeX.

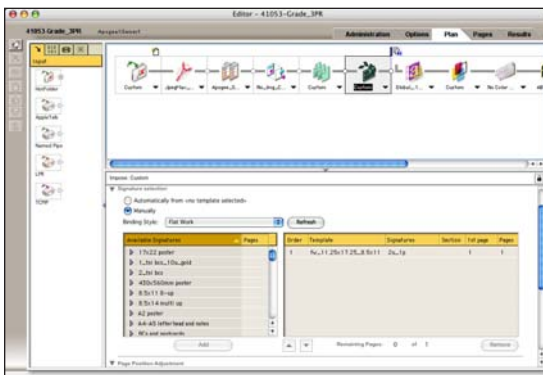
Normalize: This T.P. shows the settings used to rip the job.

Preflight: This shows the profile used to preflight the job. You may also apply an Action from the Action list if it is helpful in the flow of the job. (New actions can be created in Pitstop using Acrobat Professional)

Flattening: Flattens the job for processing.

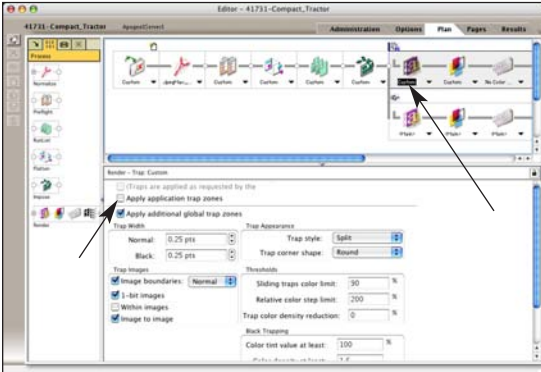
Runlist: This T.P. allows you to add or subtract the number of pages in your job.

Impose: Choose the template needed for the job under this T.P. You must select Manually under Signature Selection. Select Binding style (Either Flatwork or Saddle Stitch). Use the job ticket information to determine the template that should be used based on the run size and imposition size.

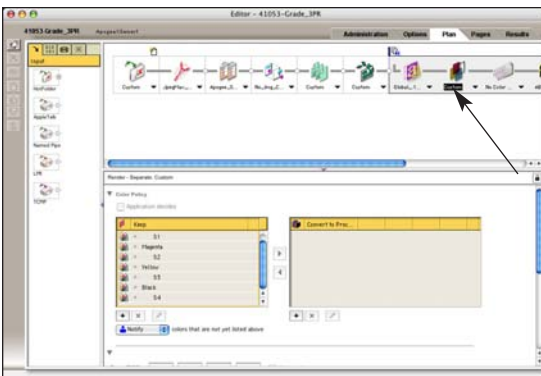


Editing The Job's Workflow

Render - Trap: This T.P. allows you to adjust several trap settings. Application trap zones can be set, which allows you to manually adjust an applications settings for more precise trap. For example: in Quark Xpress under Edit — Agfa Trapping, you can choose a specific area and apply custom trap setting to that item. You may also adjust the densities of each color under this T.P.



Render - Separate: This is where you can choose to keep a color, convert a color to process, & map color bar segments to a desired color. Color bars are labeled S1, S2, S3, & S4. These can be mapped to any colors that are in the Keep window. For 4 color jobs, start at the top by matching S1 with Cyan, S2 with Magenta, etc. If a job is a 2 color or a 3 color, start with black as S1 and work your way down to the spot colors. S1 & S3 can be mapped to the same color as well as S2 & S4. For example: If the job is two colors (Black & PANTONE 185C), S1 & S3 can be mapped to black and S2 & S4 can be mapped to PANTONE 185C.



Color Bars



Render - Render: Allows you to choose Postscript Color Management and adjust Overprint & Knockout settings.

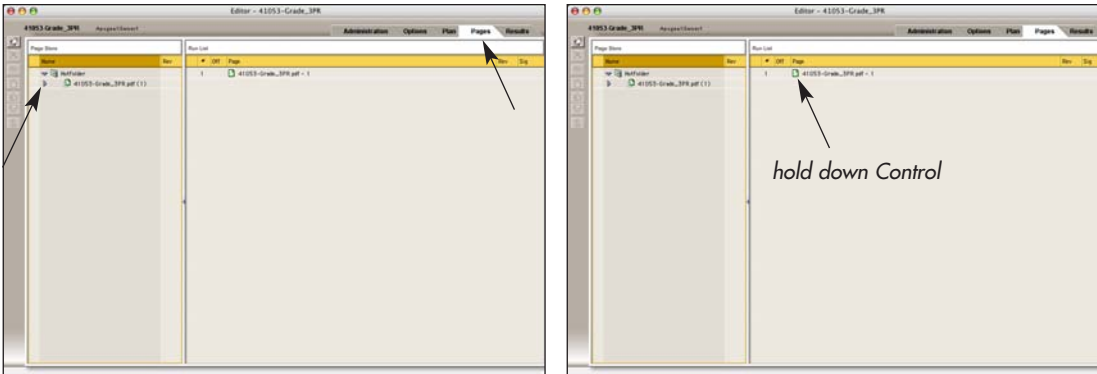
Render - Screen: Shows which linescreen, screen angles, and screen type that will be used to impose the job.

Printdrive/Press: The final T.P.'s in the workflow show the final plating info applied to the job. Plate size, Output Device, etc.

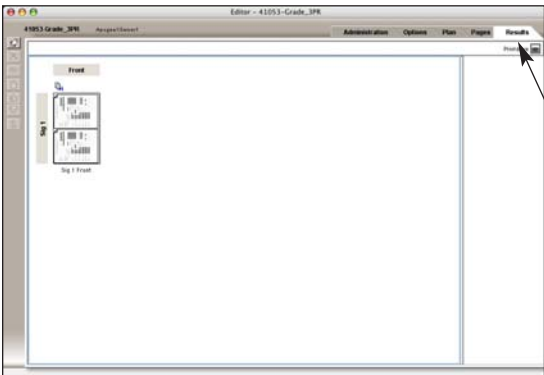
NOTE: There may be a second Render & Output applied to the job for outputting Contract proofs. Settings from the Press workflow and the Proofing workflow should match exactly!

Editing The Job's Workflow

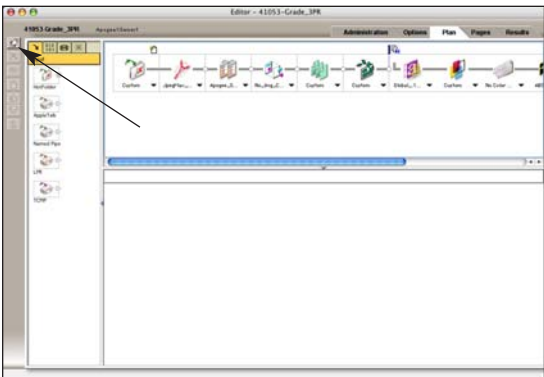
Pages Tab: This area allows you to drag pages into your runlist from the HotFolder. You can change the page order, add blank pages, and apply individual page settings (centering pages, offsets, scaling, & rotating). Hold down Control on your keyboard and click on a page(s) in your list to modify settings.



Results Tab: A basic preview of the outcome of your job.

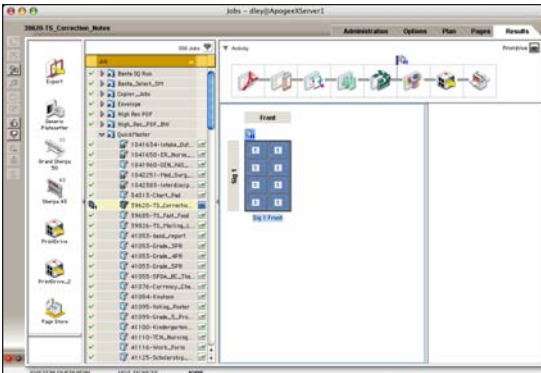


Commit Changes: After all the correct settings have been made, preflight messages have been acknowledged and/or corrected, and the preview looks satisfactory, click on this icon and it will apply any changes that you have made. The Edit window will automatically close and return you to the Jobs window.

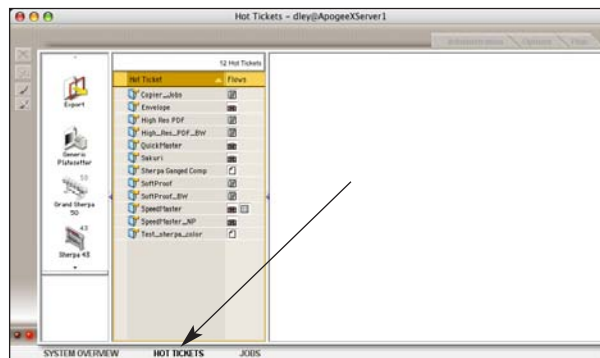
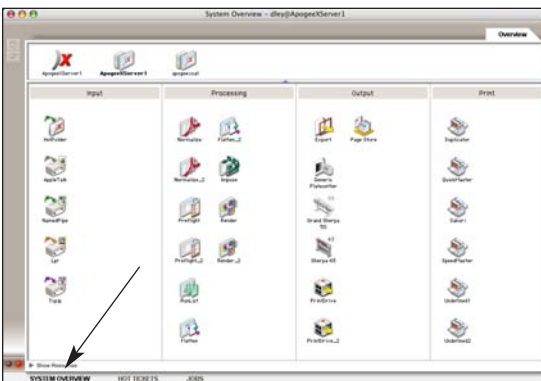


Sending To Printdrive

Continue: Once your flat turns Blue under the Results Tab, you may double click on it to view it as a PDF, this is a good way to double check all of your settings. (If a T.P. is highlighted in green, it is in use) If all looks good, click on the name of your signature (Sig 1 Front) and click on the Thumbs Up button to send your job to printdrive. (You must select every signature that you want to send.) The color separations will be shown in the right side of the window. If there are any issues or concerns... pass the info along to the plater so they are aware of the issue. At this point it is a good idea to view your job in the Preview mode on Printdrive.



Extras: At anytime if there is a problem with a job, the Delete Job button will stop the job and remove it from ApogeeX. The Reprocess Job button can be used to send the job back to the input channel, causing the job to complete the entire job cycle again. This can be useful if the job process was stopped or ApogeeX needed to be restarted. The System Overview window will show any current activity with ApogeeX (Any activity is highlighted in green). Hot Tickets are the templates used for Spectrum's workflows. Actions are used in a workflow as an aid in making changes during the entire ApogeeX process.

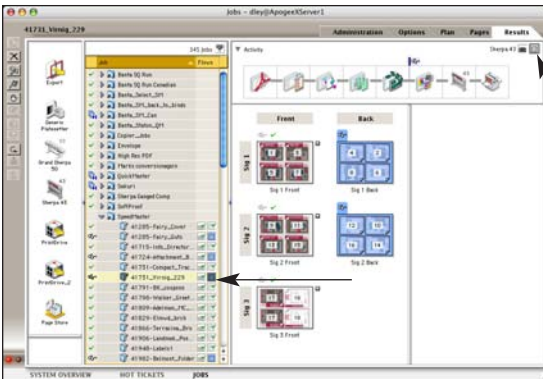


Actions

Digital Blueline & Contract Proofs

Digital Blueline Proofs (Sherpa 2): After the job has been sent to printdrive, a Digital Blueline should be printed. A final approval should be done by a proof reader or a Pre-Press Operator to double check the text, artwork, etc. Also, the imposition should be checked by a Print Production Manager or Team Lead (If neither are available, a Press Operator can check it). **See EP Plating workflow on how to print a Digital Blueline**

Contract Proofs (Sherpa 43): After the job has been sent to printdrive and a Digital Blueline has been printed and proofed, a Customer or Internal Contract Proof can be ran, if the ticket requests it (Only 4 color, 5 color, or 6 color jobs need one). If a Contract Proof is going to the customer, a Proof Copy sticker should be applied to the proof with the correct information filled out.



Color Bars



Changing Cassettes on the Palladio/Hand Feed Plates

Cassette #1	Speedmaster	H1 - Hand Feed
Cassette #2	Quickmaster	H2 - Hand Feed
Cassette #3	Duplicator or Envelope	H3 - Hand Feed
Cassette #4	Sakuri	H4 - Hand Feed

Change Cassettes

1. On the Print Drive computer, bring up the device menu and stop the Palladio.
2. Open the doors and take out the plate cassette.
3. Put in the new cassette. (Cassette #1 or Cassette #2)
4. On the Palladio, hit the enter button. Then hit the menu button. It should automatically read the cassette that you put in.
5. Go to the computer and Start the Palladio.

Hand Feed Plates

1. On the Print Drive computer, bring up the device menu and stop the Palladio.
2. On the Palladio, hit menu and then arrow key over to Exposure. Hit enter.
Arrow key to load and hit enter. It will now read "cassette."
Arrow key to manual and hit enter. Arrow key to H1, H2, H3, or H4 and hit enter.
Press menu until it tells you to set the plate (approx. 3 times).
Open the top door and place the plate in. Close the door and hit enter.
Press menu once. It will read: H1, H2, H3, or H4.
3. Start the Palladio back up, and send your job. Remember to make it H1, H2, H3, or H4.
When you are done with hand feeding, go through the same procedure, but pick the desired cassette at the load plate setting.

Sherpa 43 Calibration (Testing) QMS

- Clean the printer multiple times. Press the “clean” button and hold down for two seconds.
- Launch QMSX - Login
- Click on Sherpa 43.
- Double click on QMS on the bottom.
- Double click on CMYK.
- Click on APB 165.
- Click on proof check.
- Print
- Wait 15 minutes to dry.
- Click on measure.
- Next
- Save or cancel

END OF TEST

- Calibrate - Print
- Let Dry 1 hour.
- Cut all pieces apart.
- Run each strip twice (all strips).
- Run test

EP ApogeeX Users

1. Go to the Start Menu
2. Go to Search
3. Type in "hosts" click search
4. Double click on "hosts" and open in Notepad
5. Type in the Computers IP Address "192.168.2. "
6. Tab over and type the username "jdoe"
7. Save the file
8. Right click on My Computer — Management — Local Users & Groups — Users
9. Right click on new user
10. Enter the users info — create

Note: The password for Service on ApogeeX is "CMOREDOMORE"

EP Design Info

Available Stock Art:

www.photos.com

User Name: spectrumprt

Pass Word: spda

www.ablestock.com

User Name:

wandringa@spectrumprt.com

Pass Word: 091788

www.clipart.com

User Name: spectrumpda

Pass Word: spda

EP Indicia

Little Falls

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
LITTLE FALLS, MN
PERMIT NO. 9

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
LITTLE FALLS, MN
PERMIT NO. 9

PRSRT STD
U.S. POSTAGE
PAID
LITTLE FALLS, MN
PERMIT NO. 9

PRSRT STD
U.S. POSTAGE
PAID
LITTLE FALLS, MN
PERMIT NO. 9

Alexandria

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
ALEXANDRIA, MN
PERMIT NO. 3

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
ALEXANDRIA, MN
PERMIT NO. 3

PRSRT STD
U.S. POSTAGE
PAID
ALEXANDRIA, MN
PERMIT NO. 3

PRSRT STD
U.S. POSTAGE
PAID
ALEXANDRIA, MN
PERMIT NO. 3

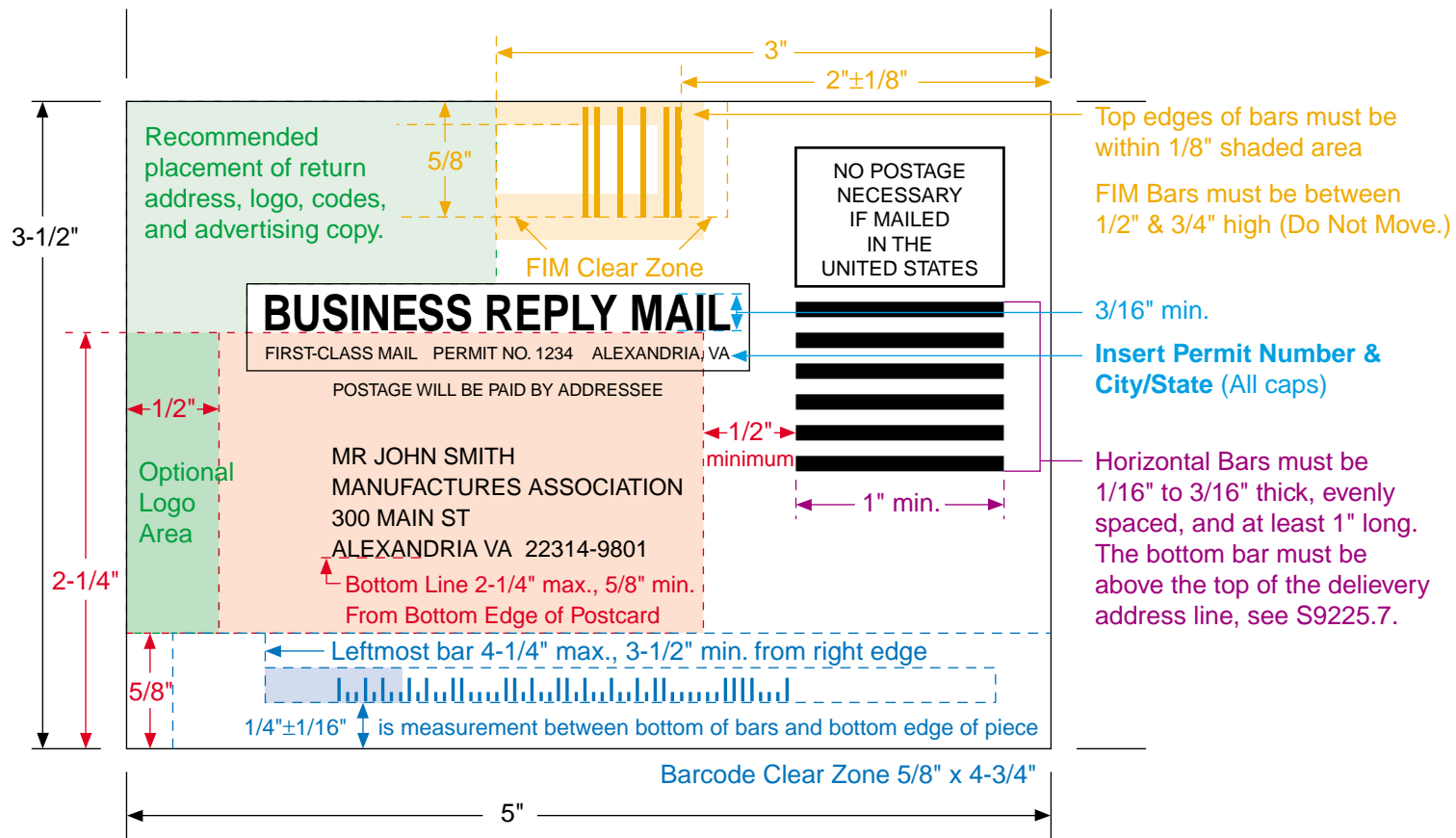
Wadena

PRESORTED
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PRESORTED
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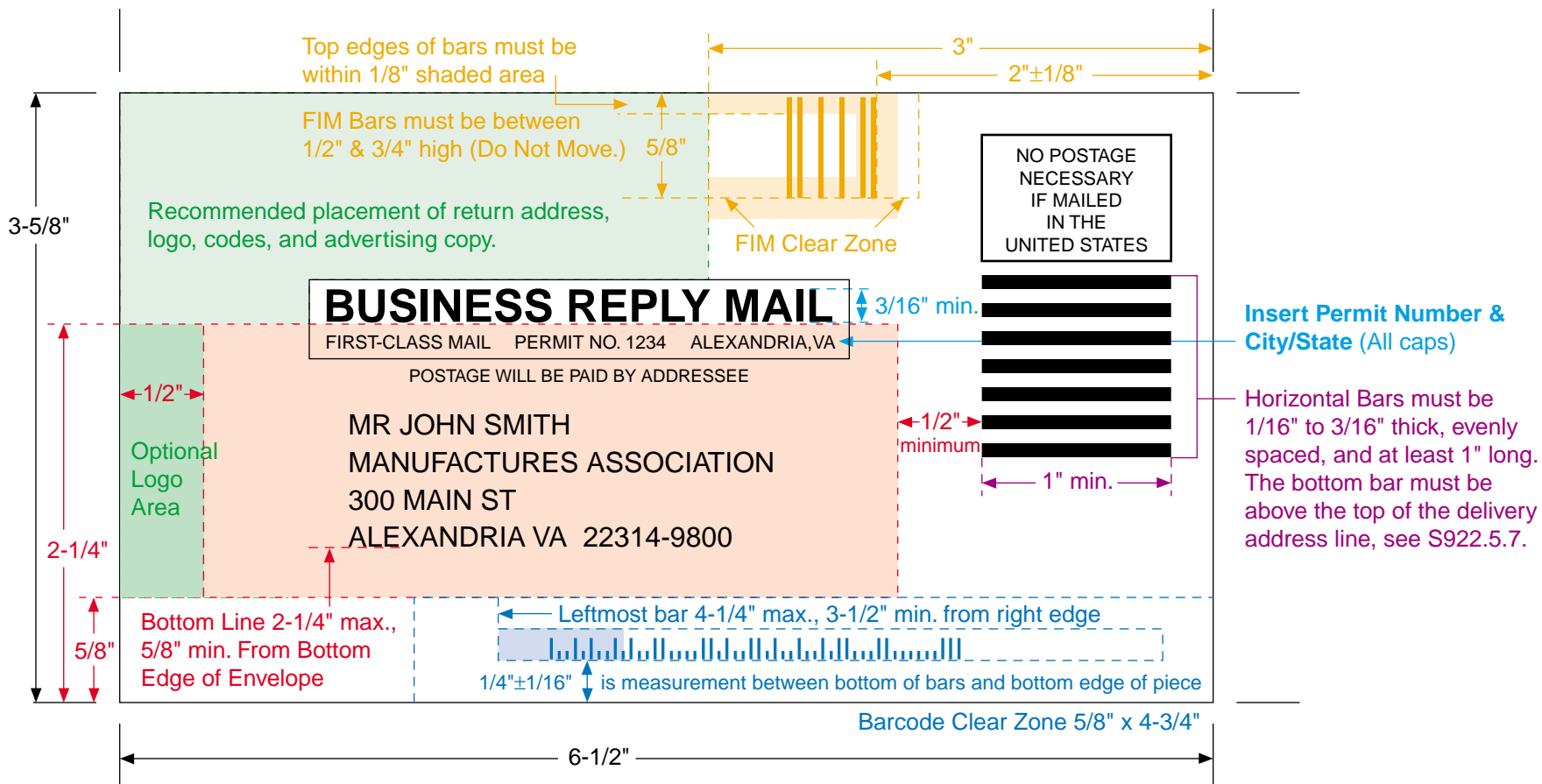
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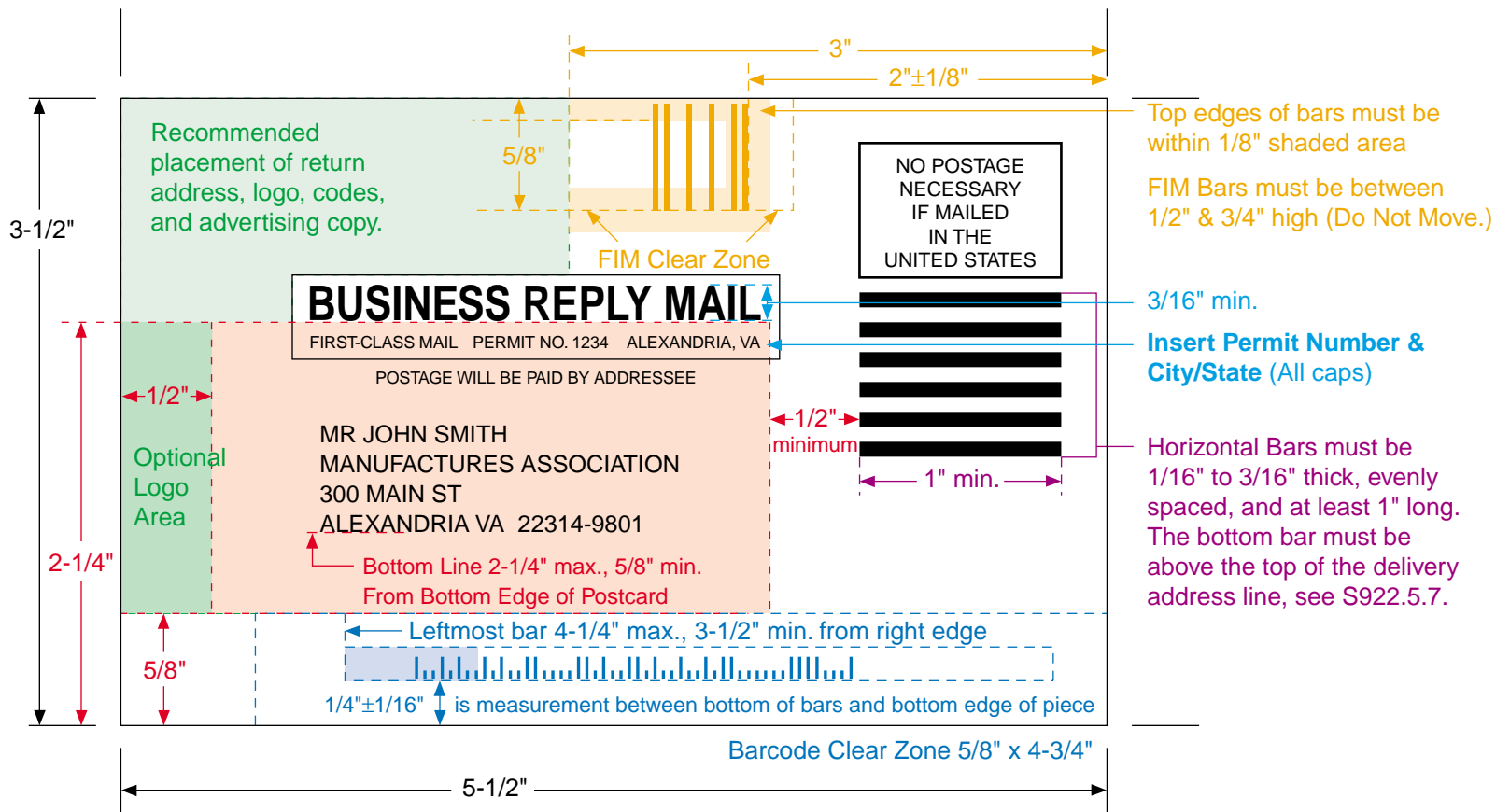
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Dimensions Layer



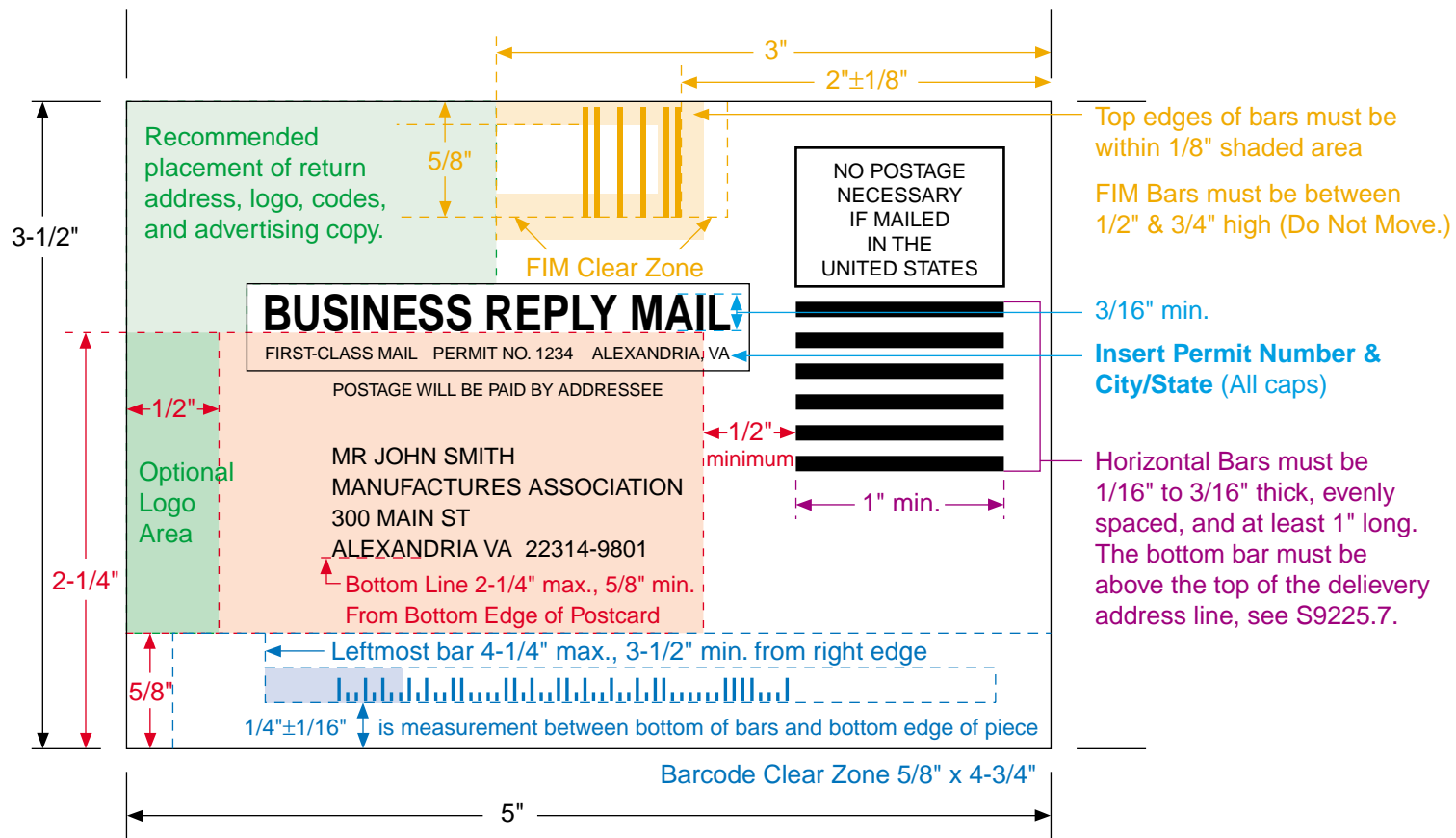
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Dimensions Layer



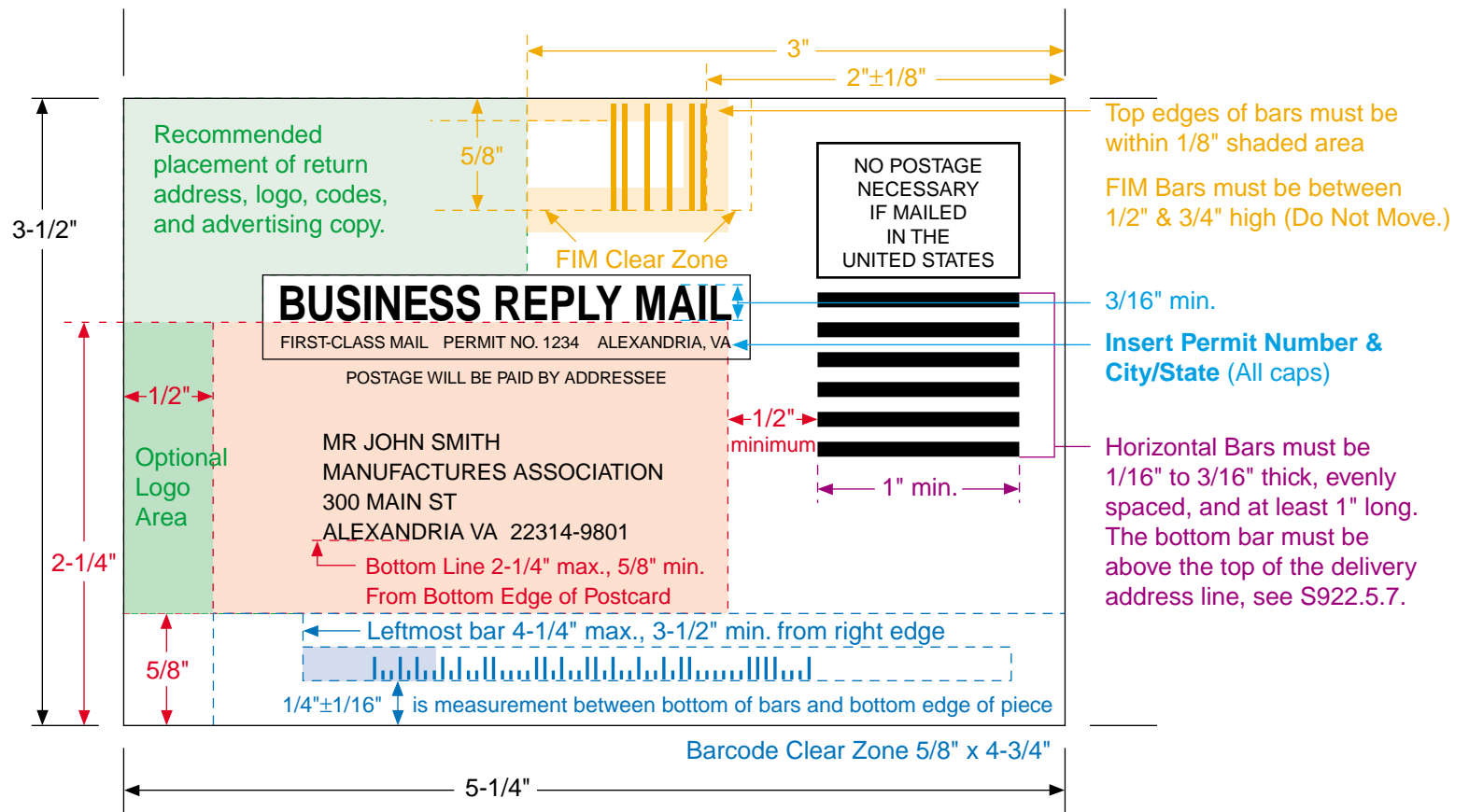
USPS BRM Template Card 3-1/2" x 5-1/2"

Dimensions Layer



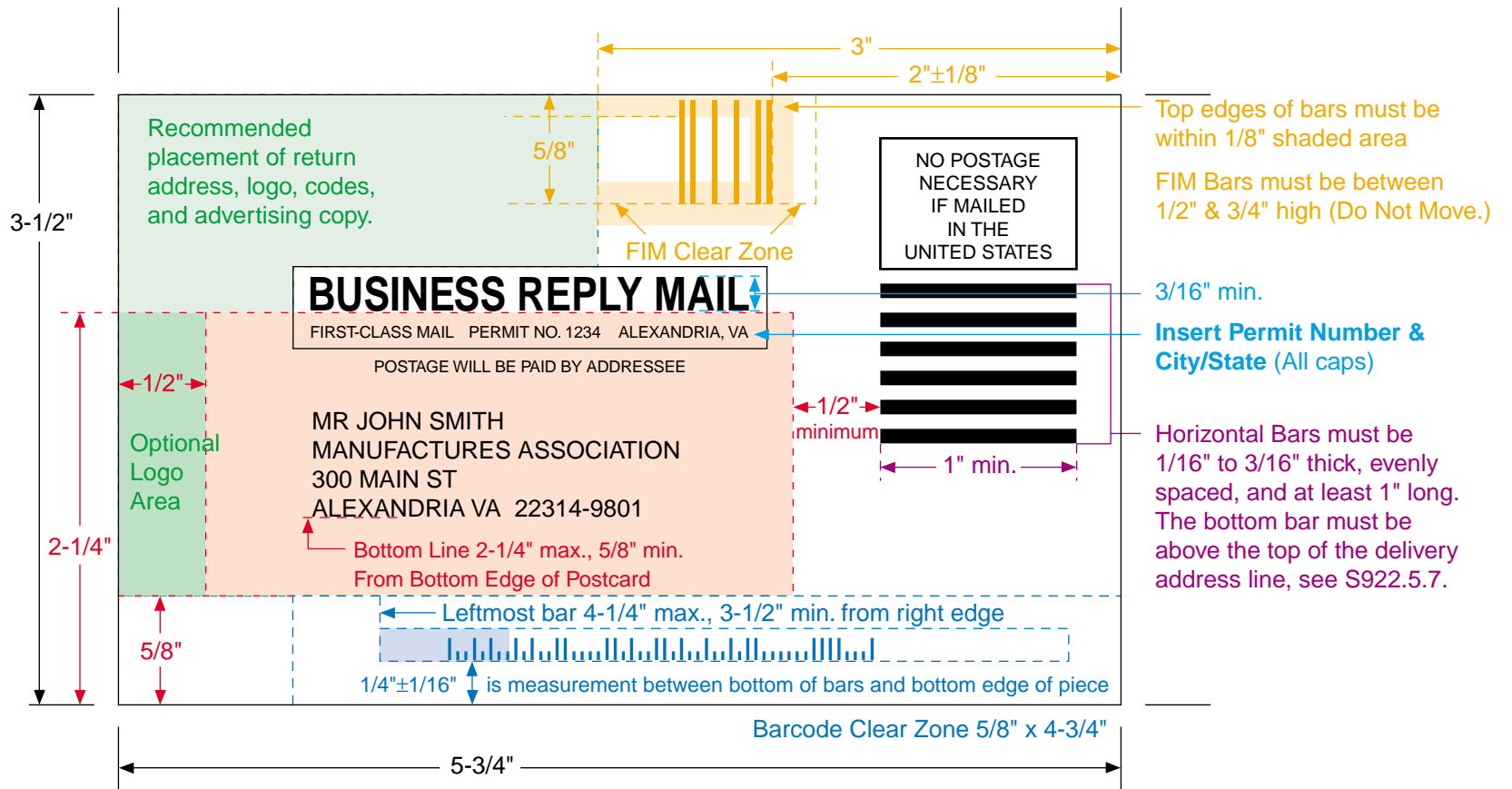
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Dimensions Layer



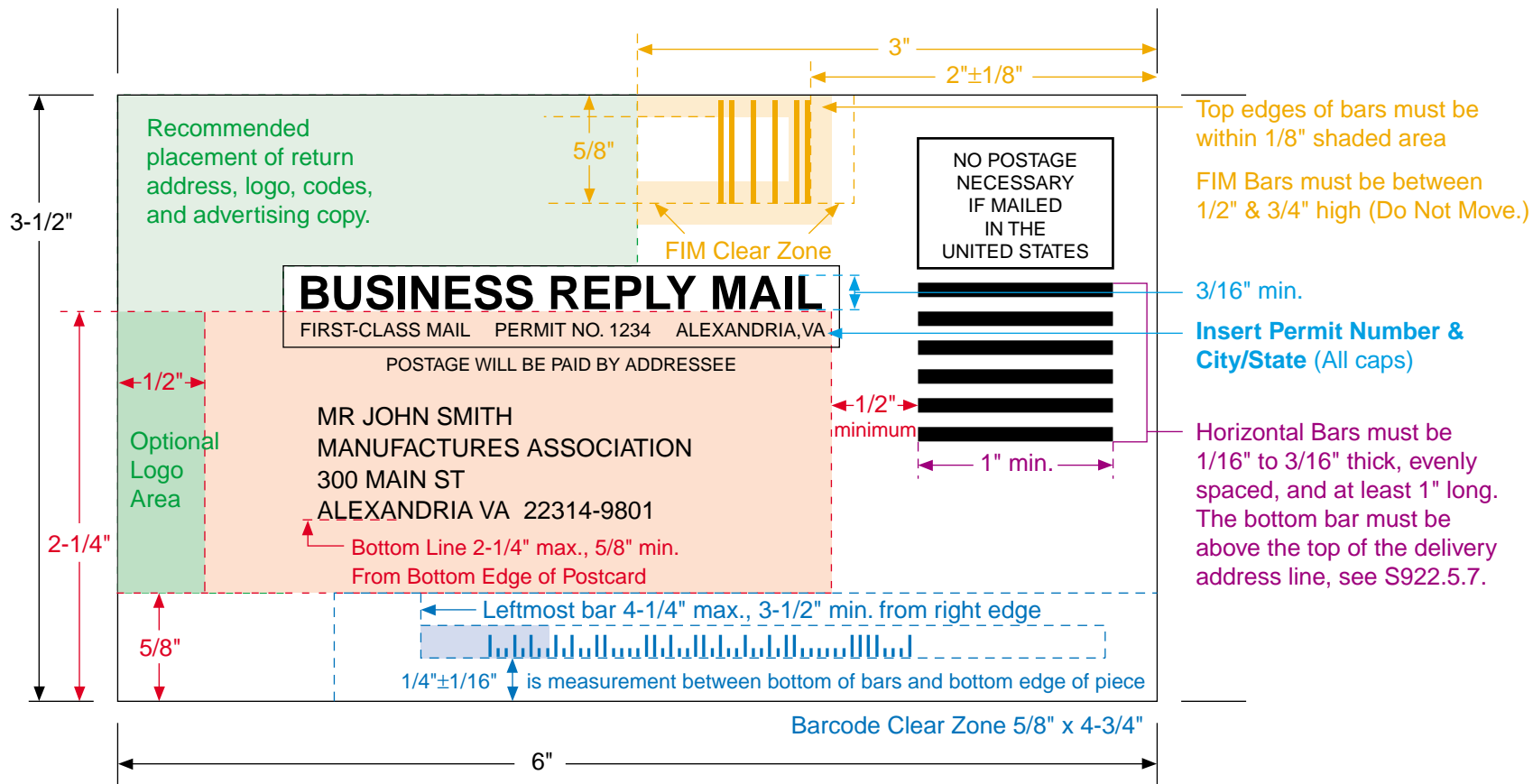
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Dimensions Layer



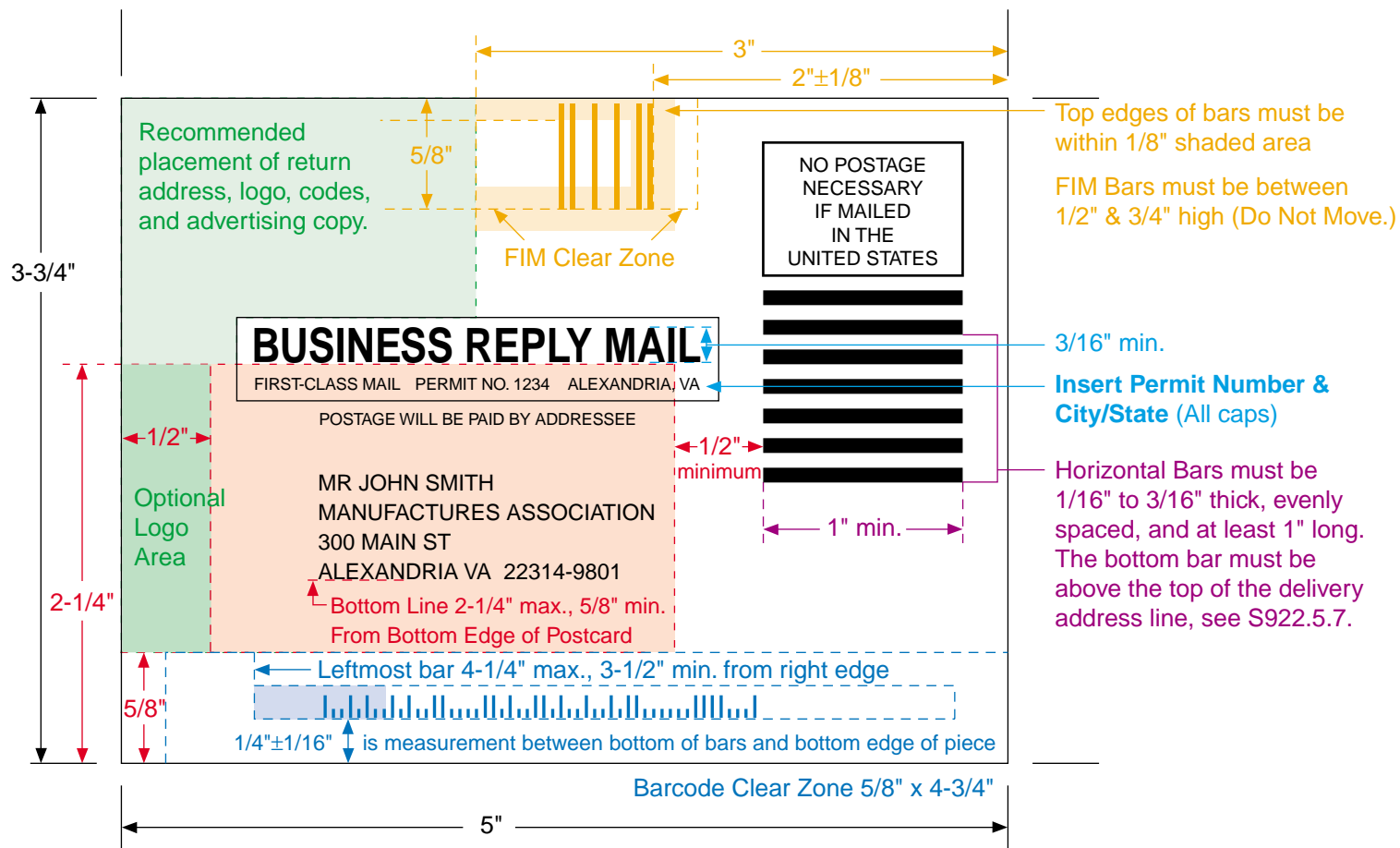
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Dimensions Layer



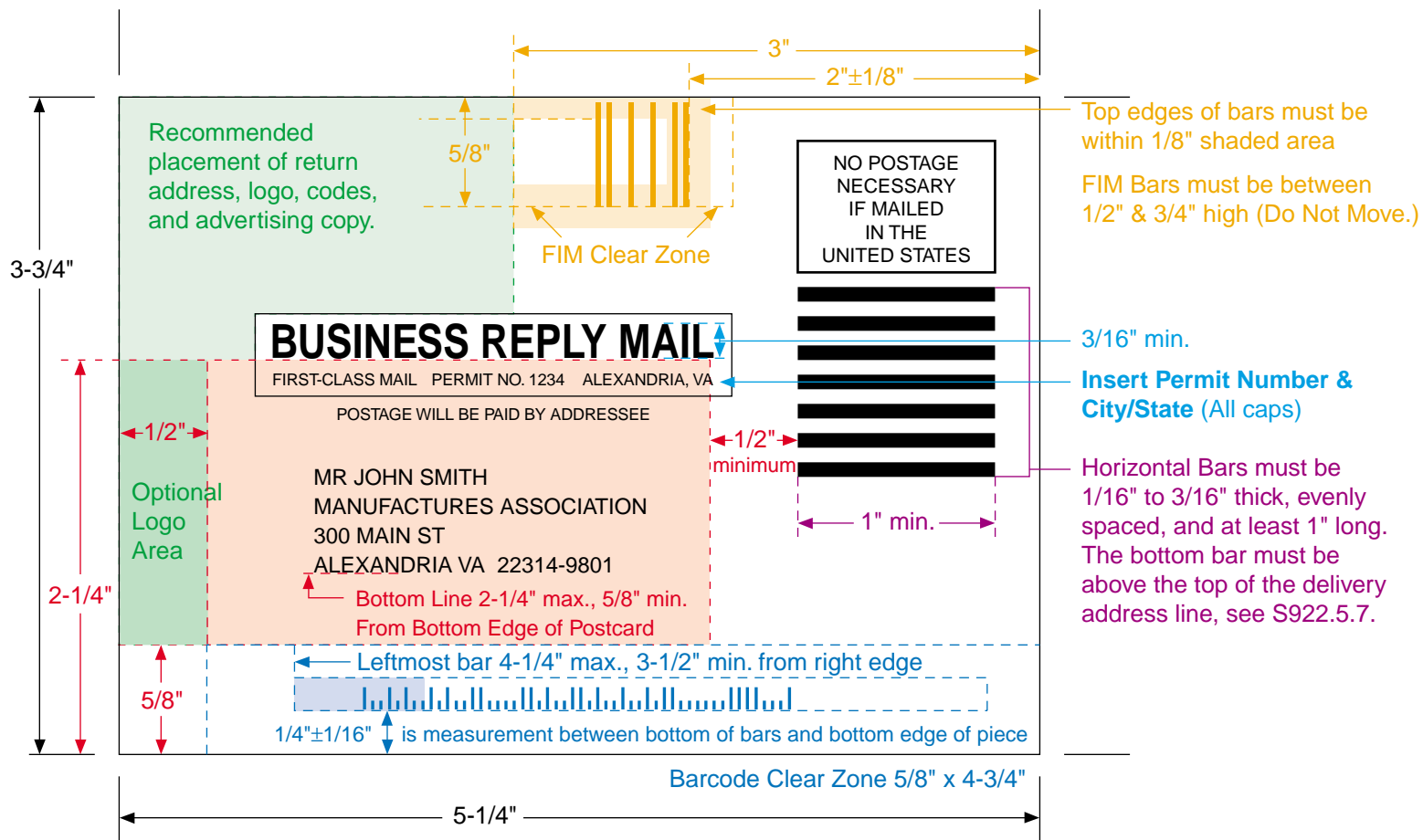
USPS BRM Template Card 3-1/2" x 6"

Dimensions Layer



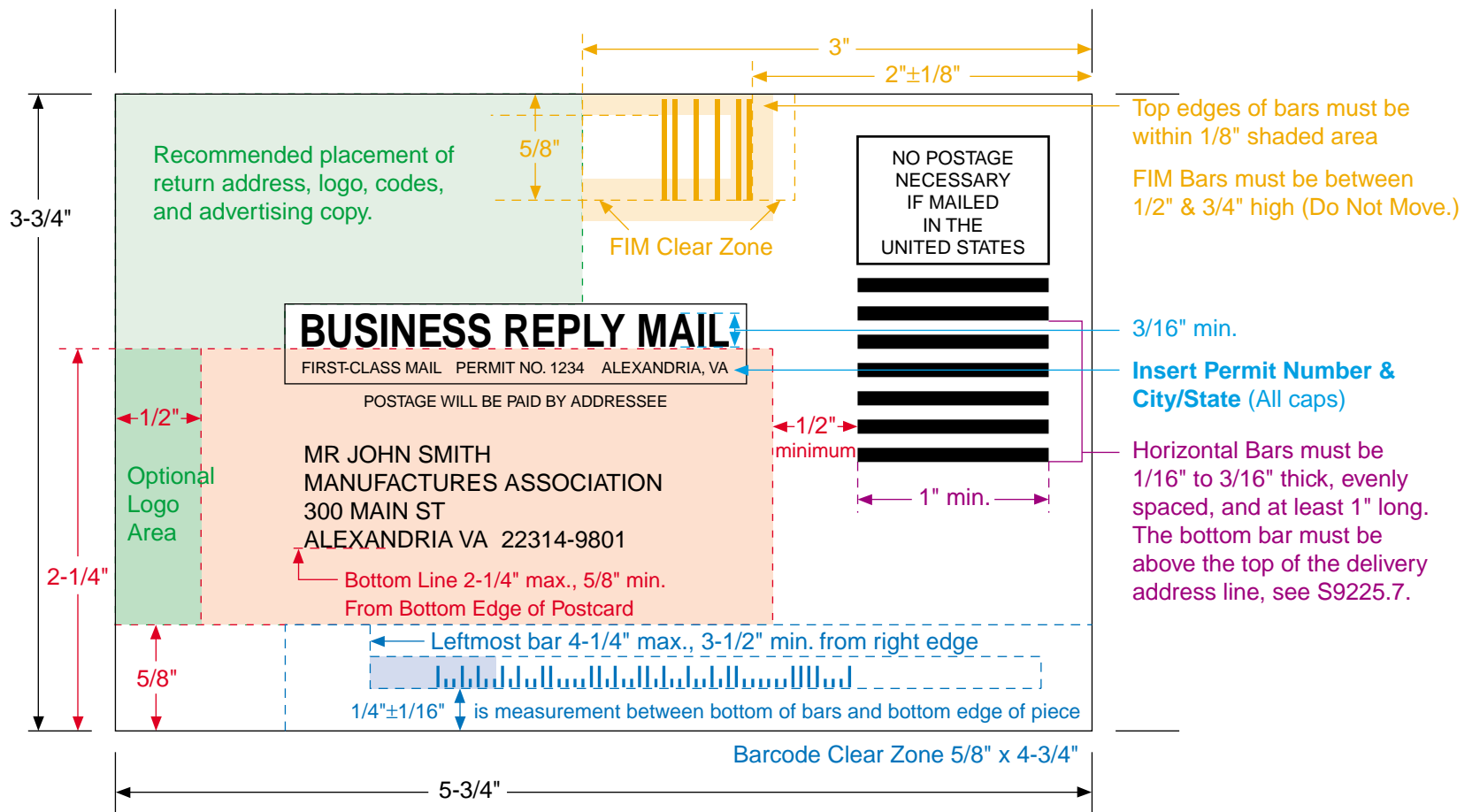
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Dimensions Layer



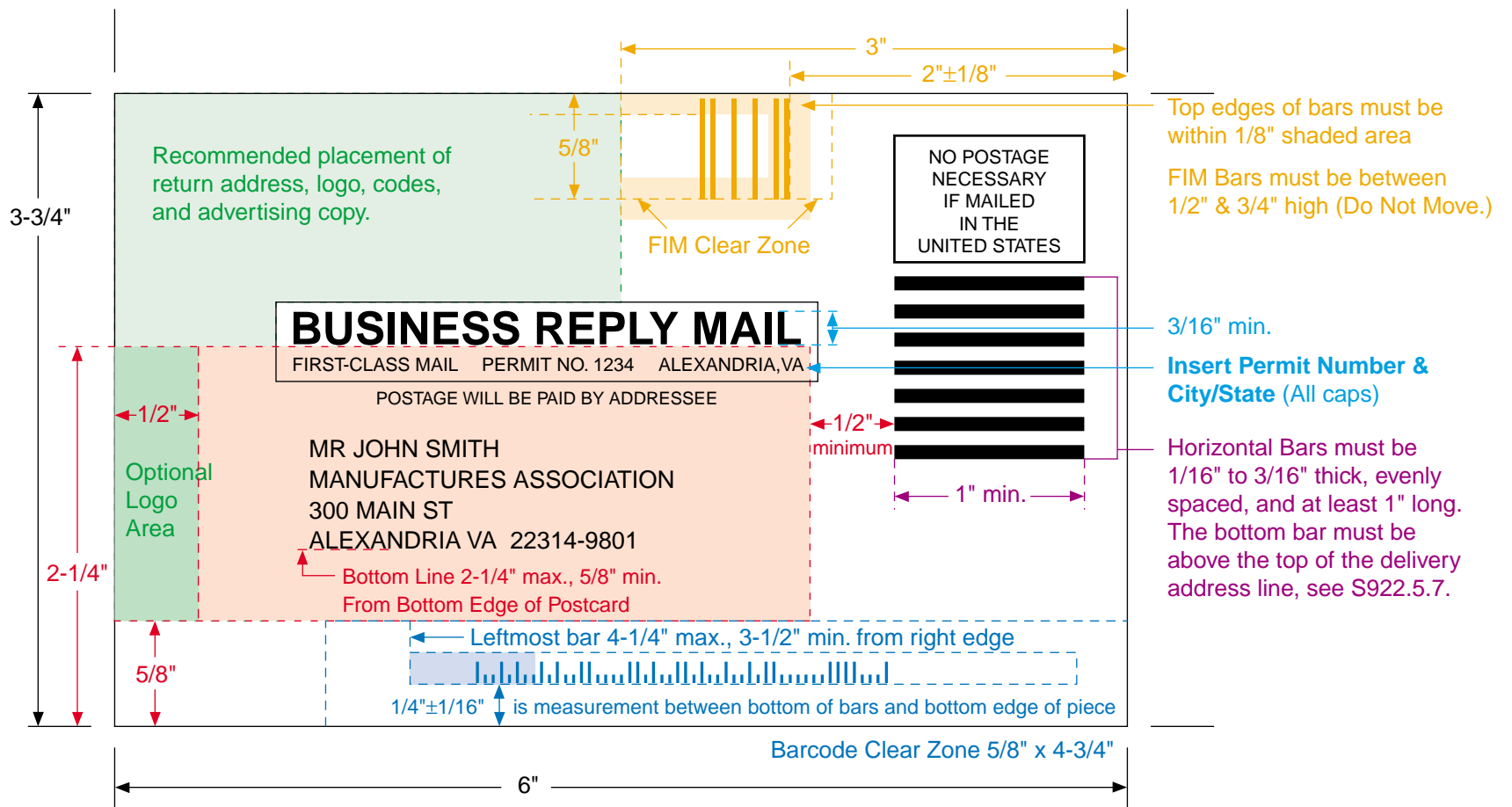
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Dimensions Layer



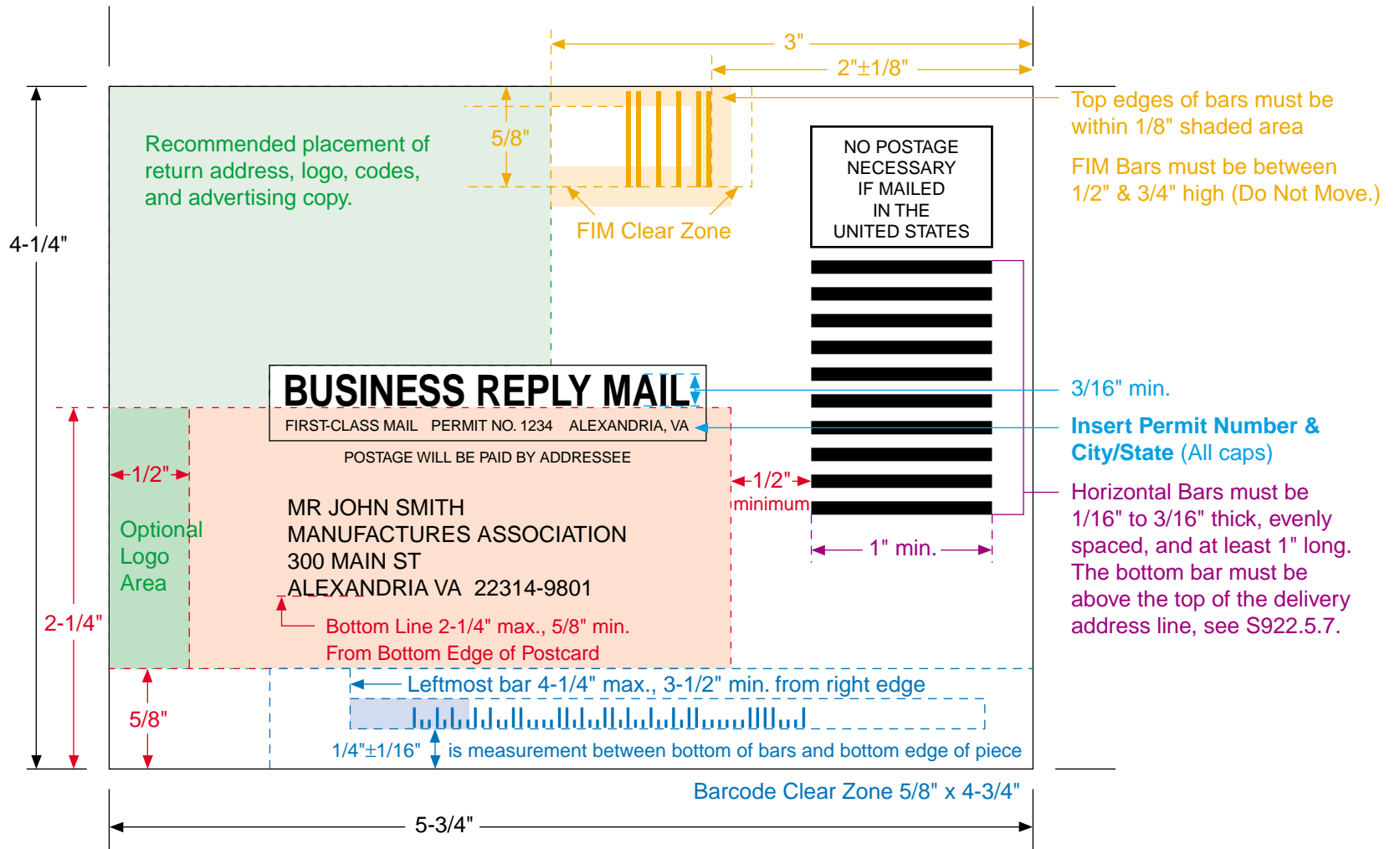
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Dimensions Layer



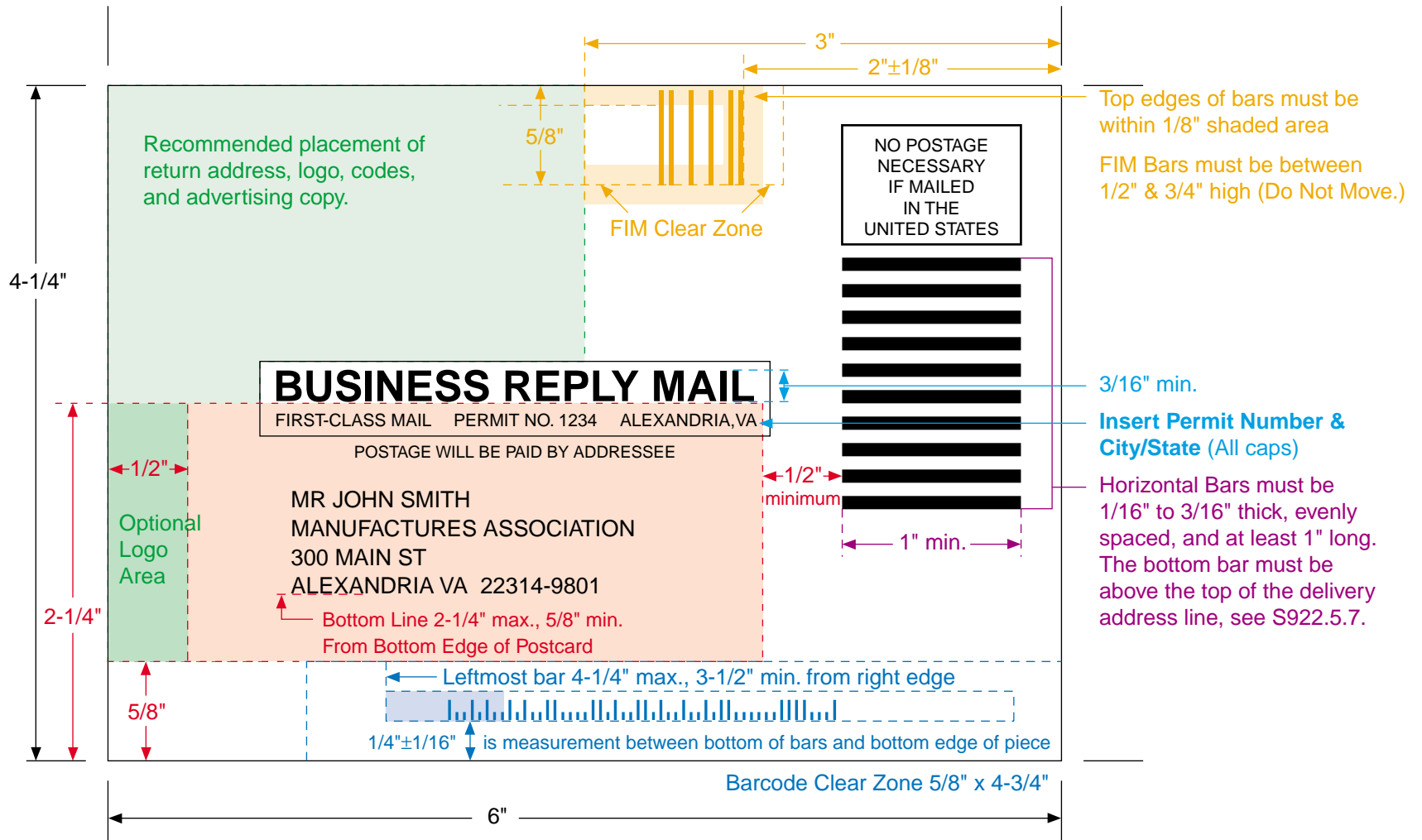
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Dimensions Layer



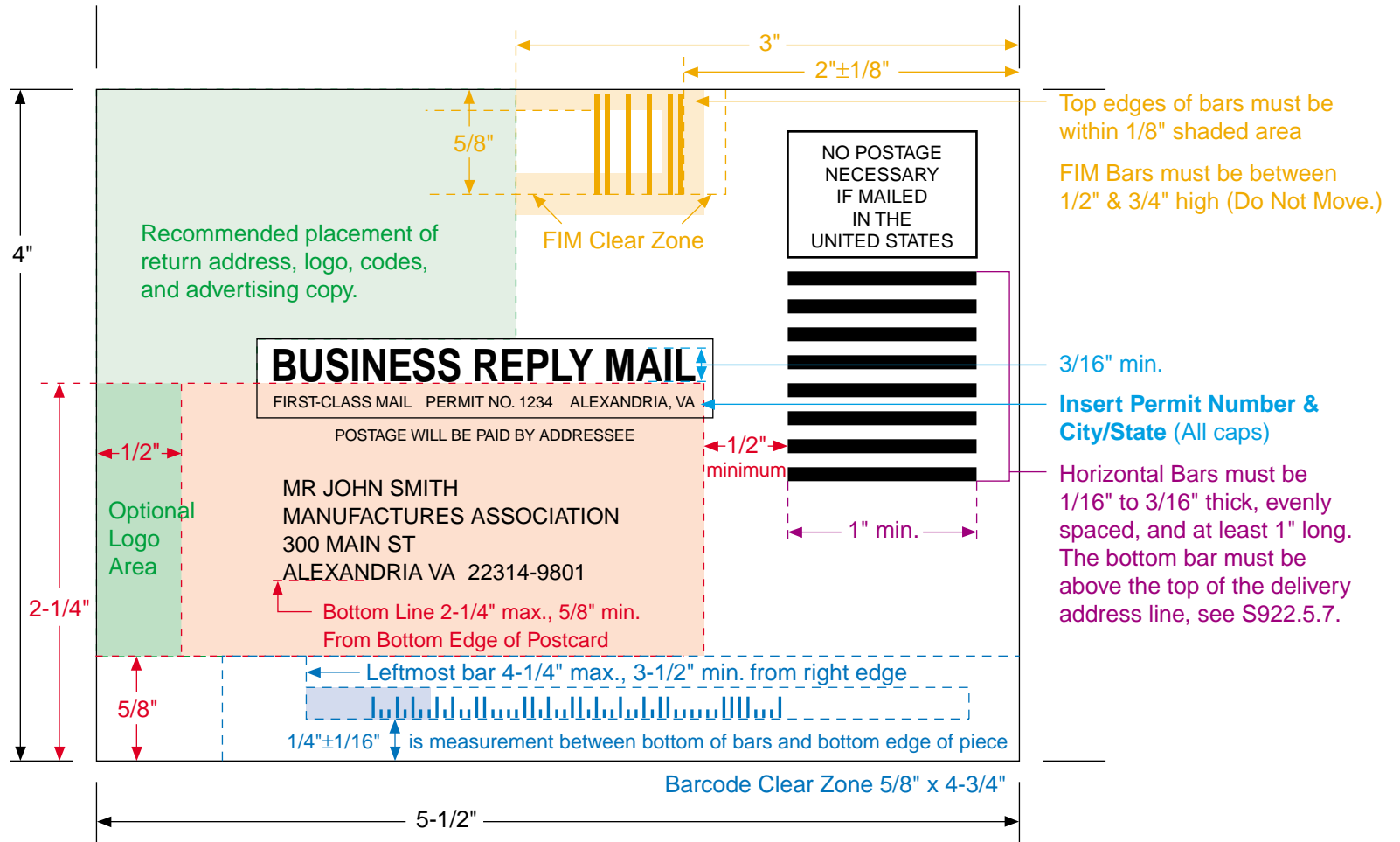
USPS BRM Template Card 4-1/4" x 5-3/4"

Dimensions Layer



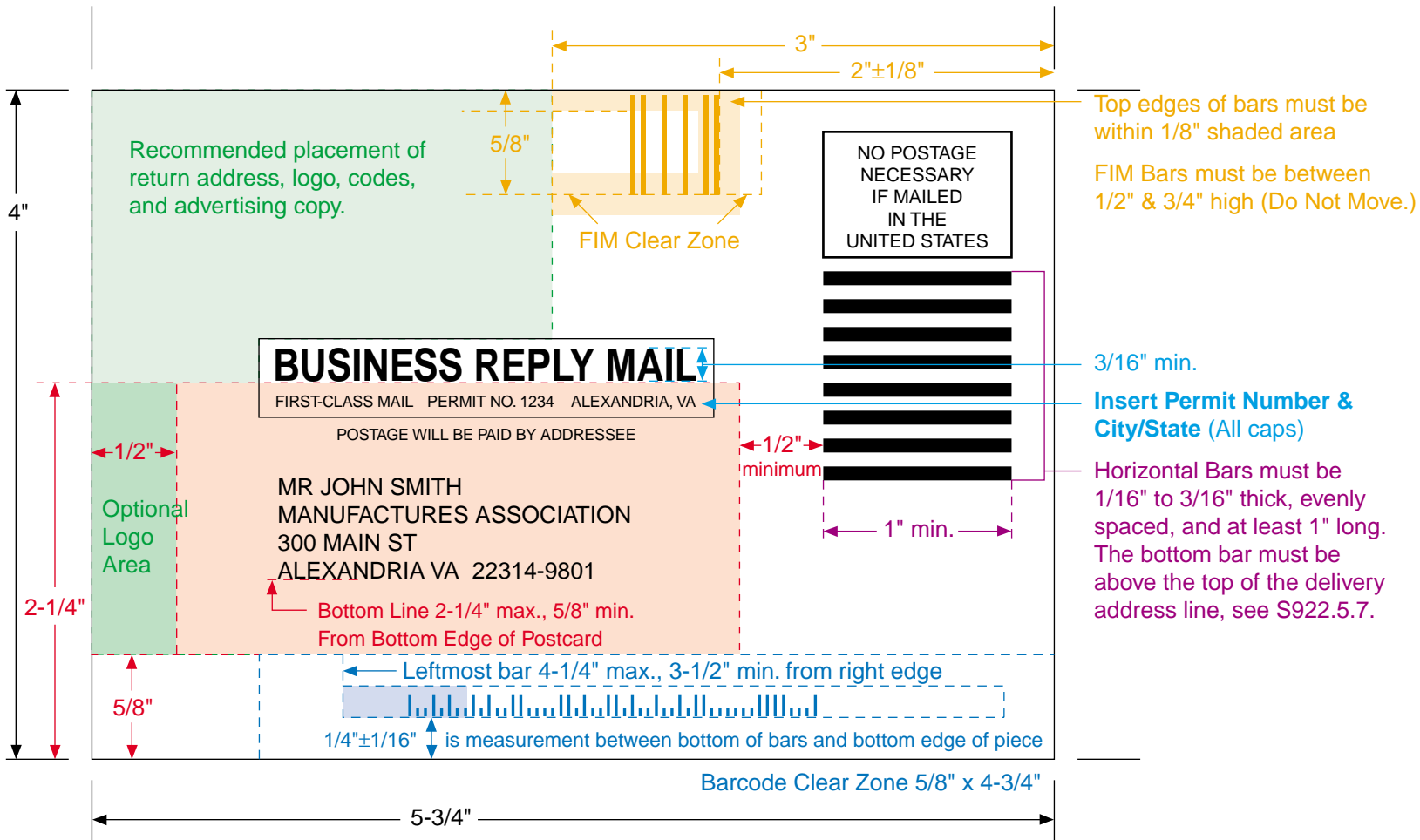
USPS BRM Template Card 4-1/4" x 6"

Dimensions Layer



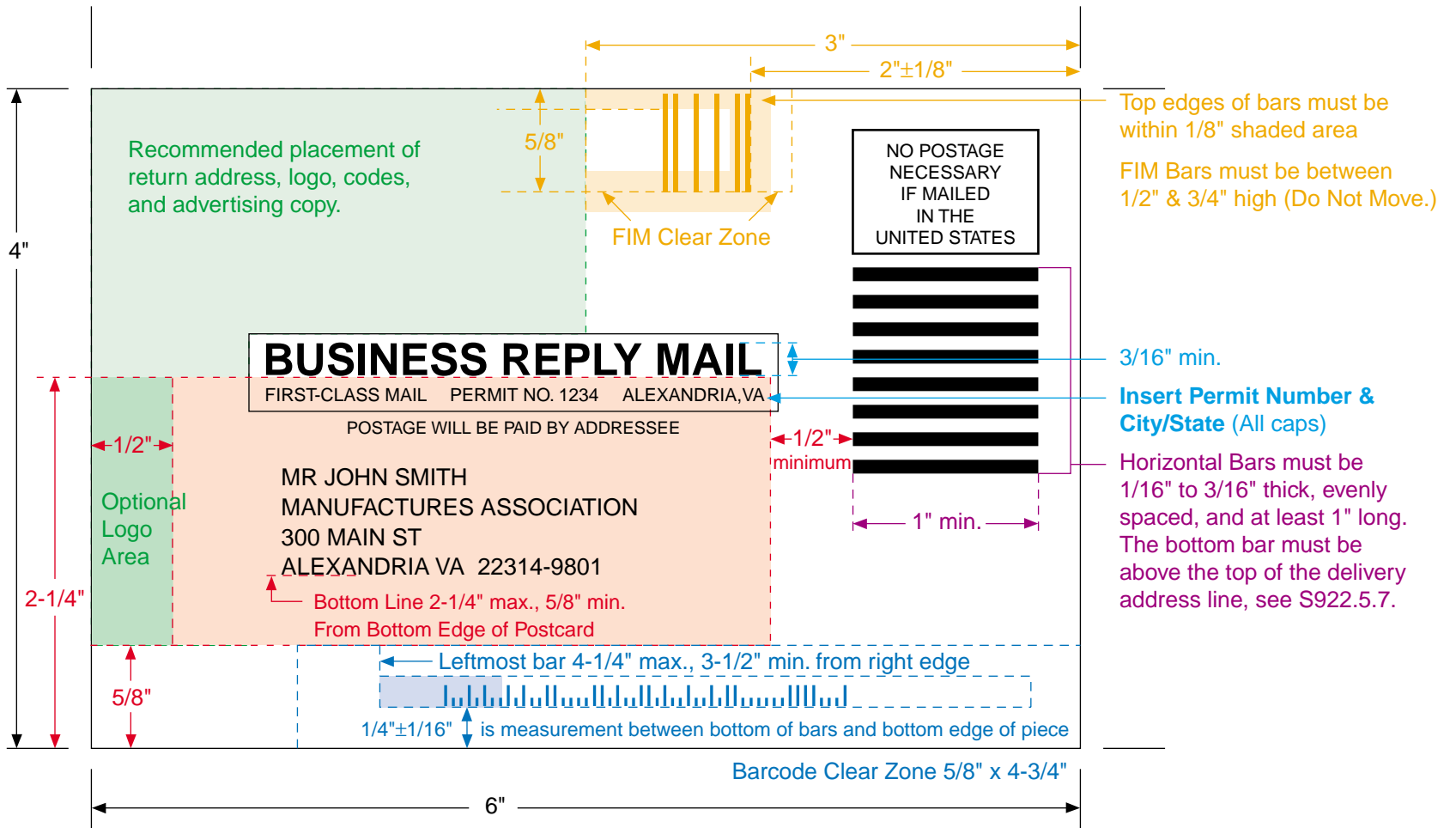
USPS BRM Template Card 4" x 5-1/2"

Dimensions Layer



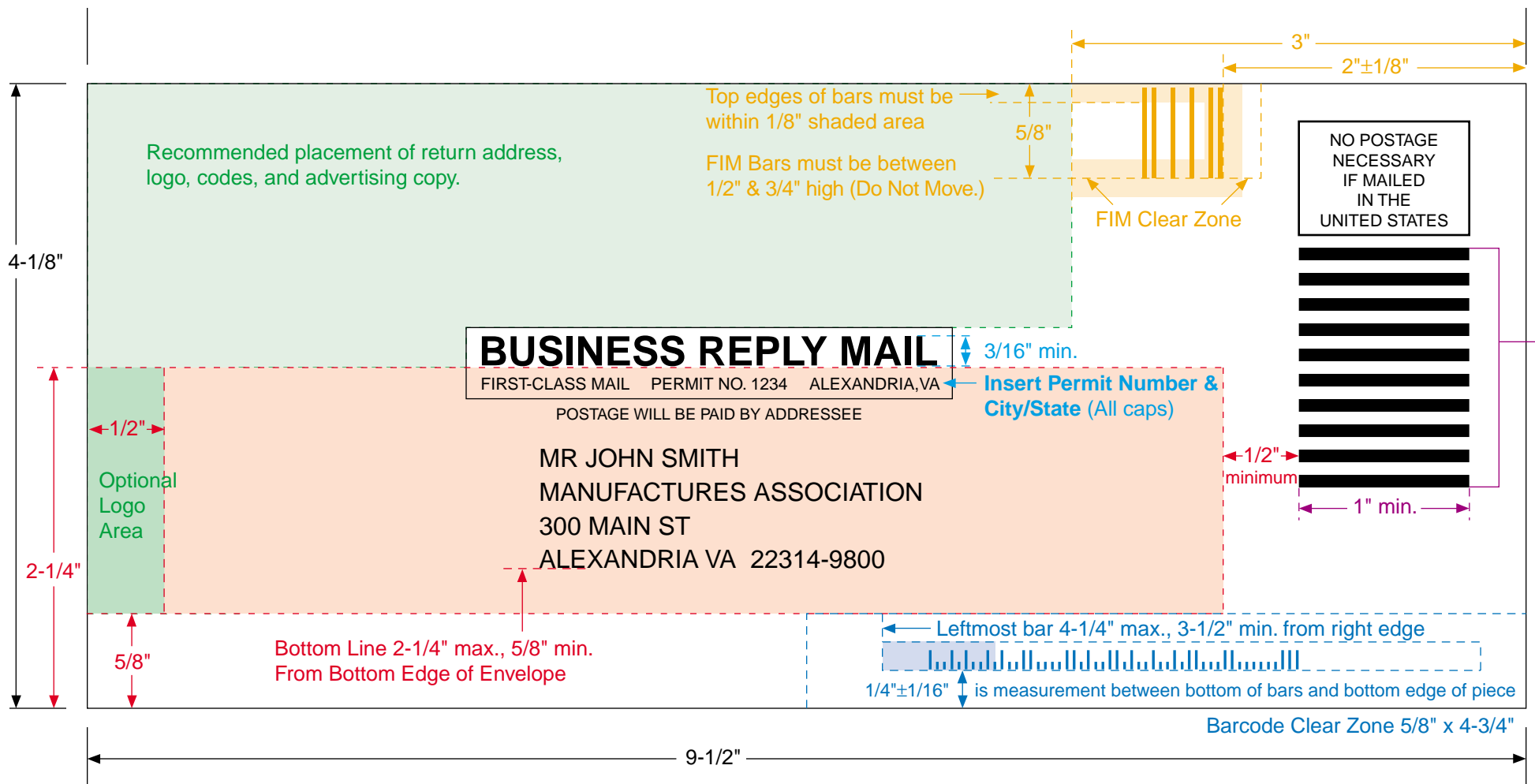
USPS BRM Template Card 4" x 5-3/4"

Dimensions Layer



USPS BRM Template Card 4" x 6"

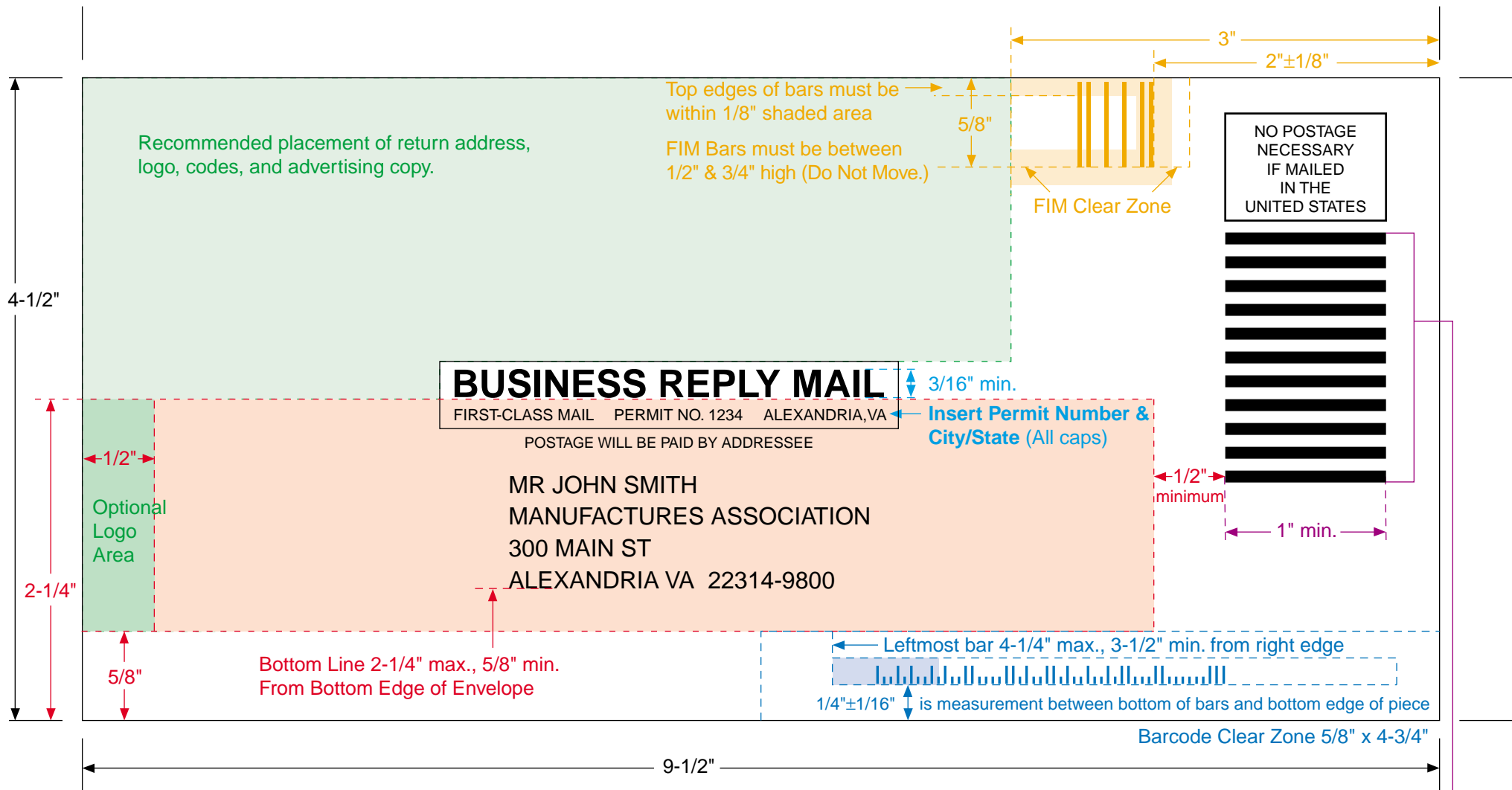
Dimensions Layer



Horizontal Bars must be 1/16" to 3/16" thick, evenly spaced, and at least 1" long. The bottom bar must be above the top of the delivery address line, see S922.5.7.

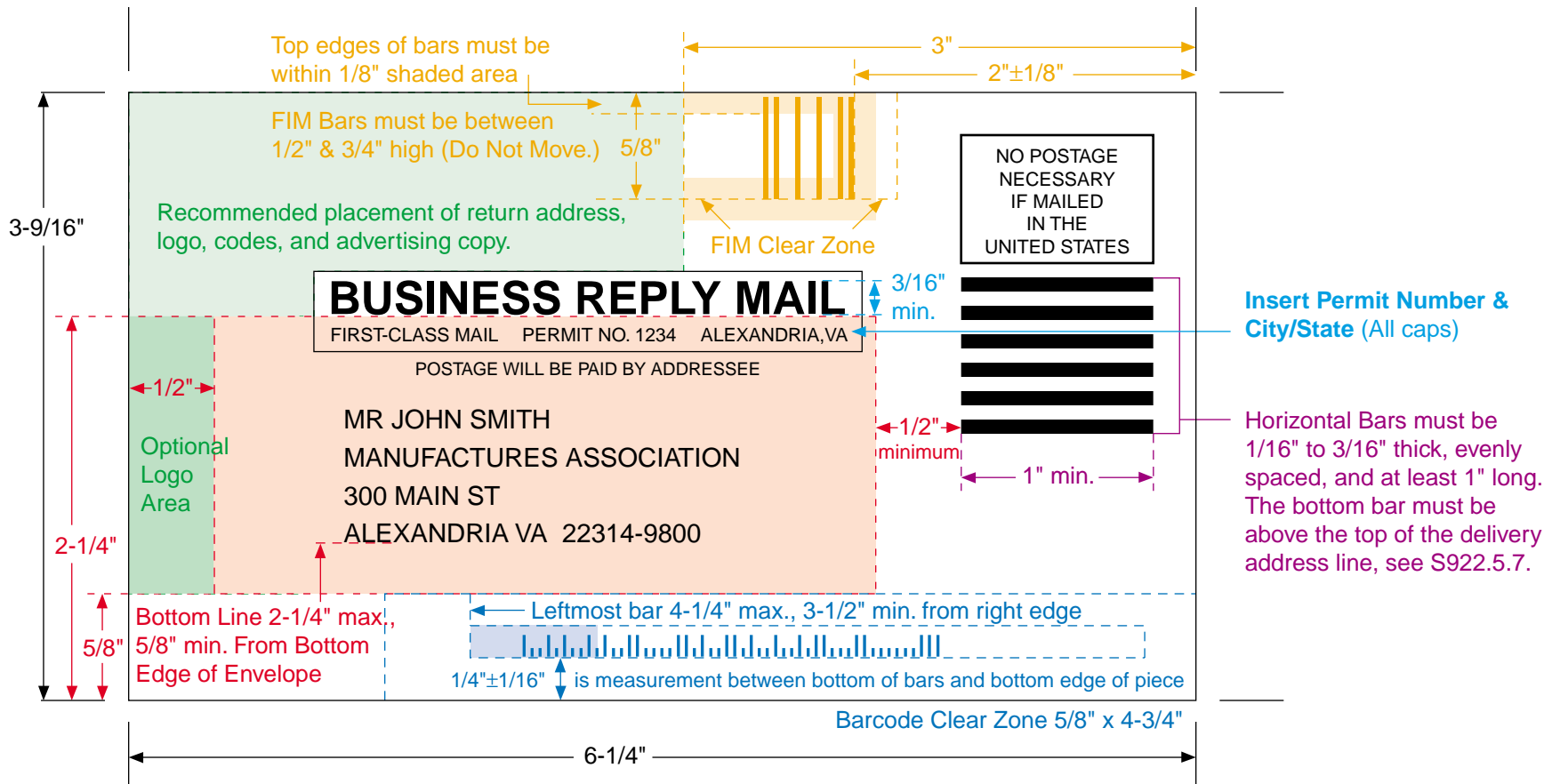
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Dimensions Layer



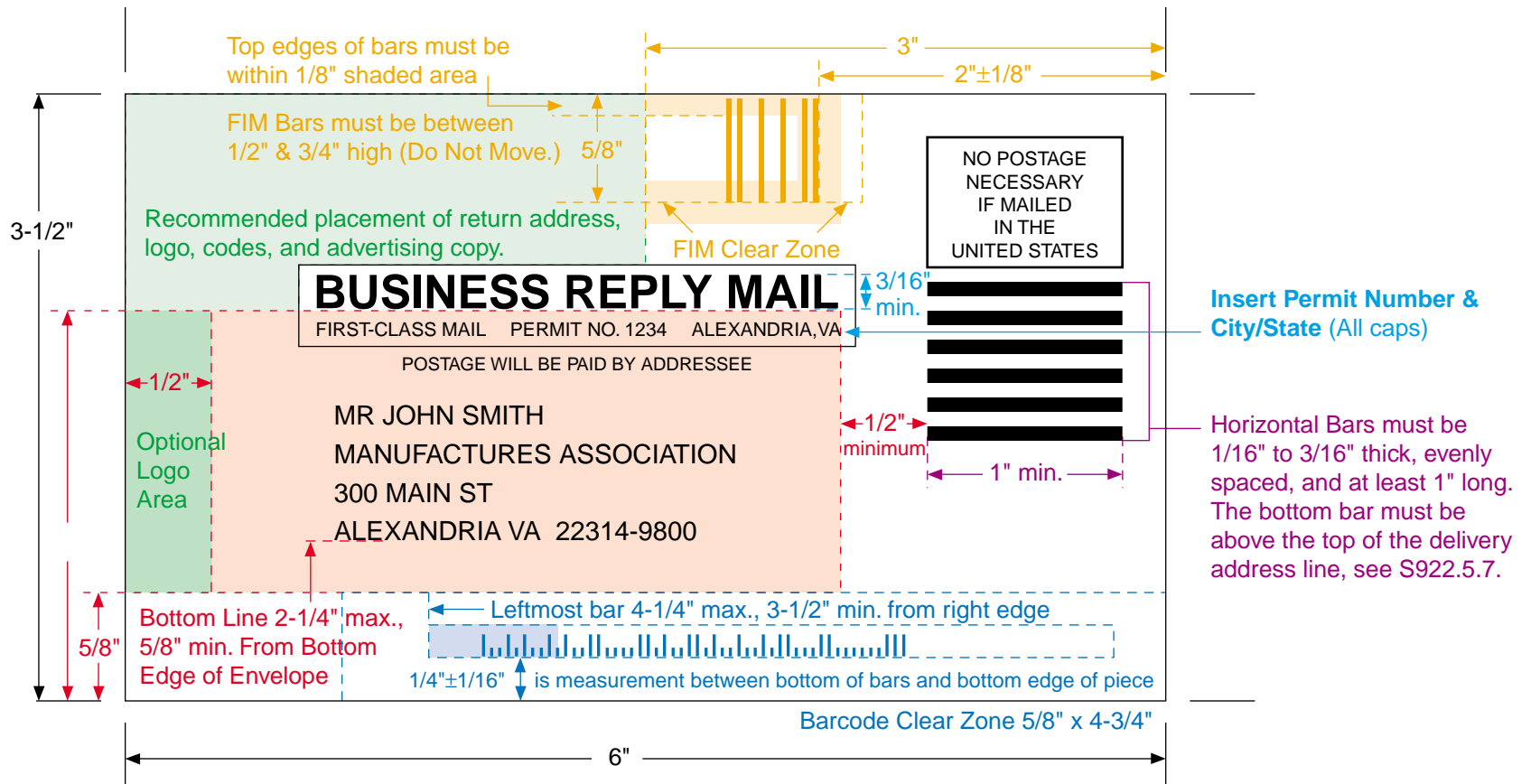
USPS BRM Template #10-1/2 Envelope 4-1/2" x 9-1/2"
Dimensions Layer

Horizontal Bars must be 1/16" to 3/16" thick, evenly spaced, and at least 1" long. The bottom bar must be above the top of the delivery address line, see S922.5.7.



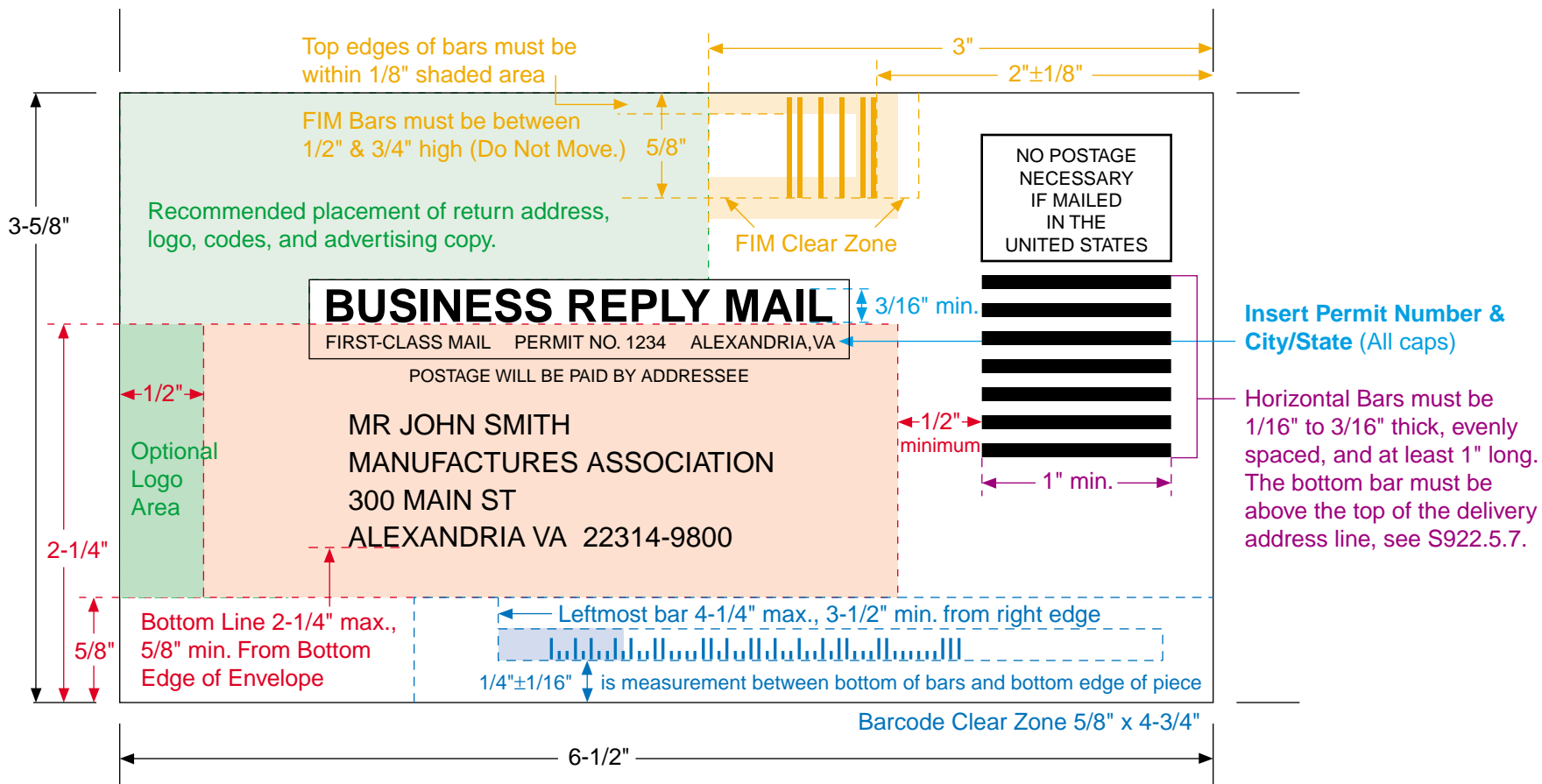
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Dimensions Layer



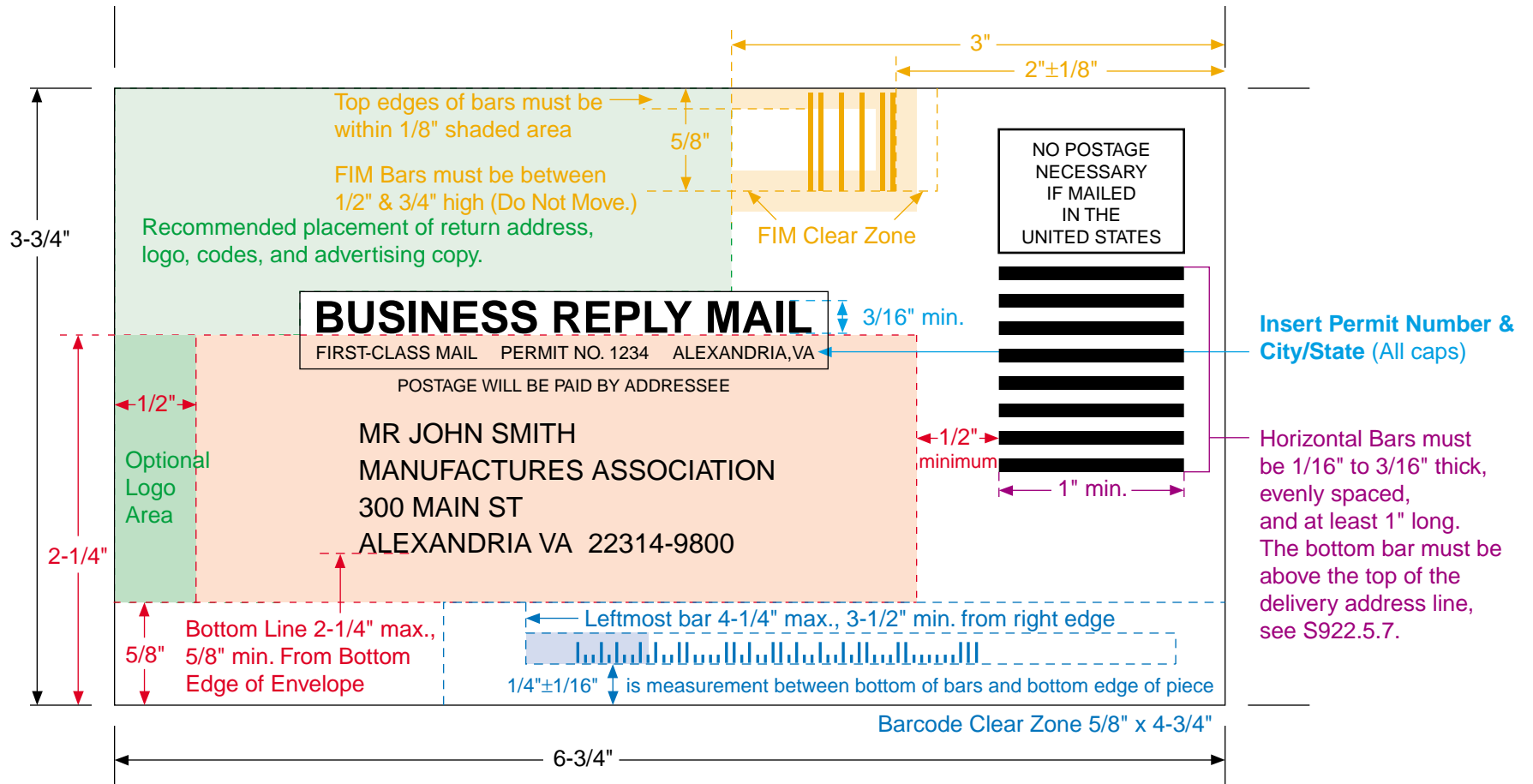
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Dimensions Layer



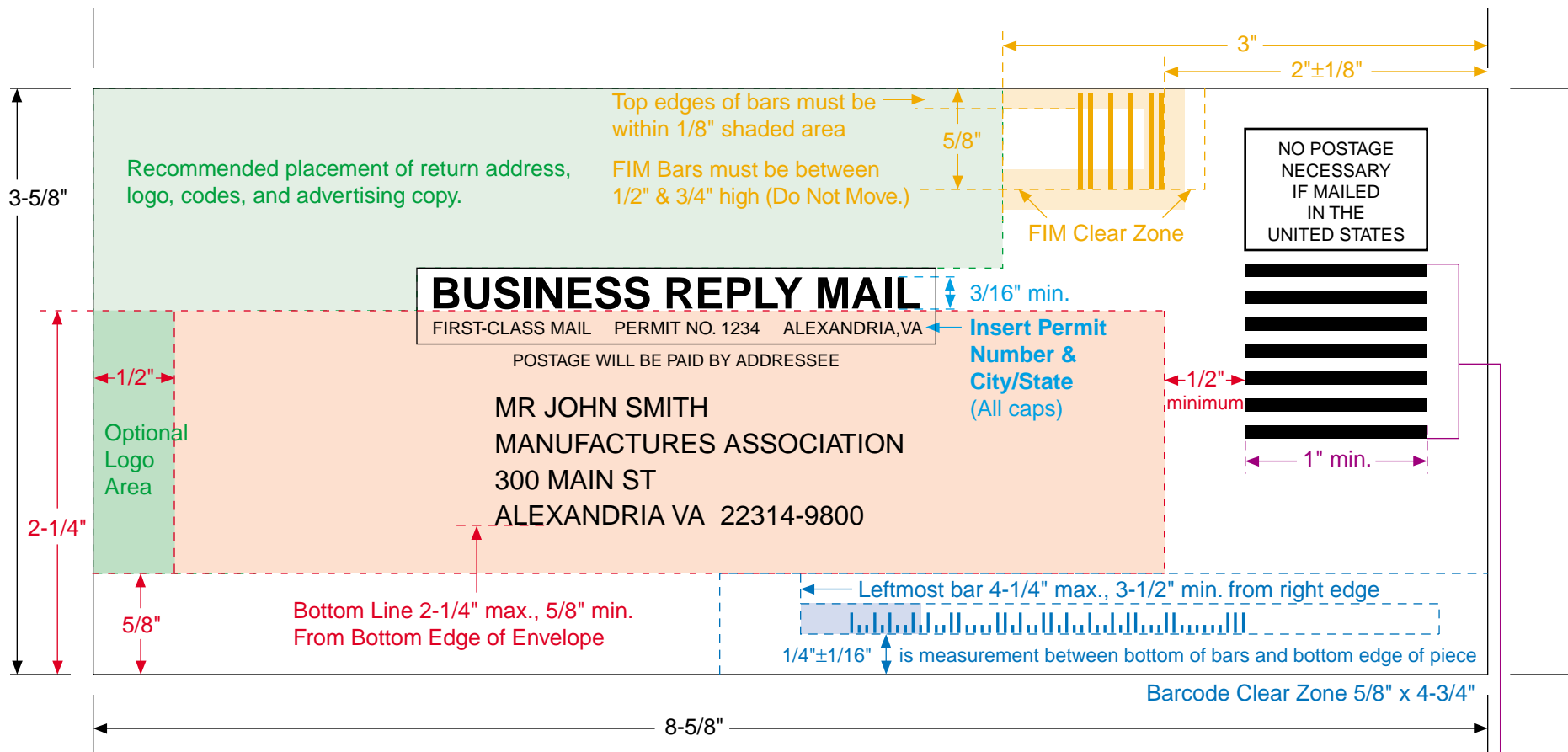
USPS BRM Template #6-3/4 Envelope 3-5/8" x 6-1/2"

Dimensions Layer



USPS BRM Template #7 Envelope 3-3/4" x 6-3/4"

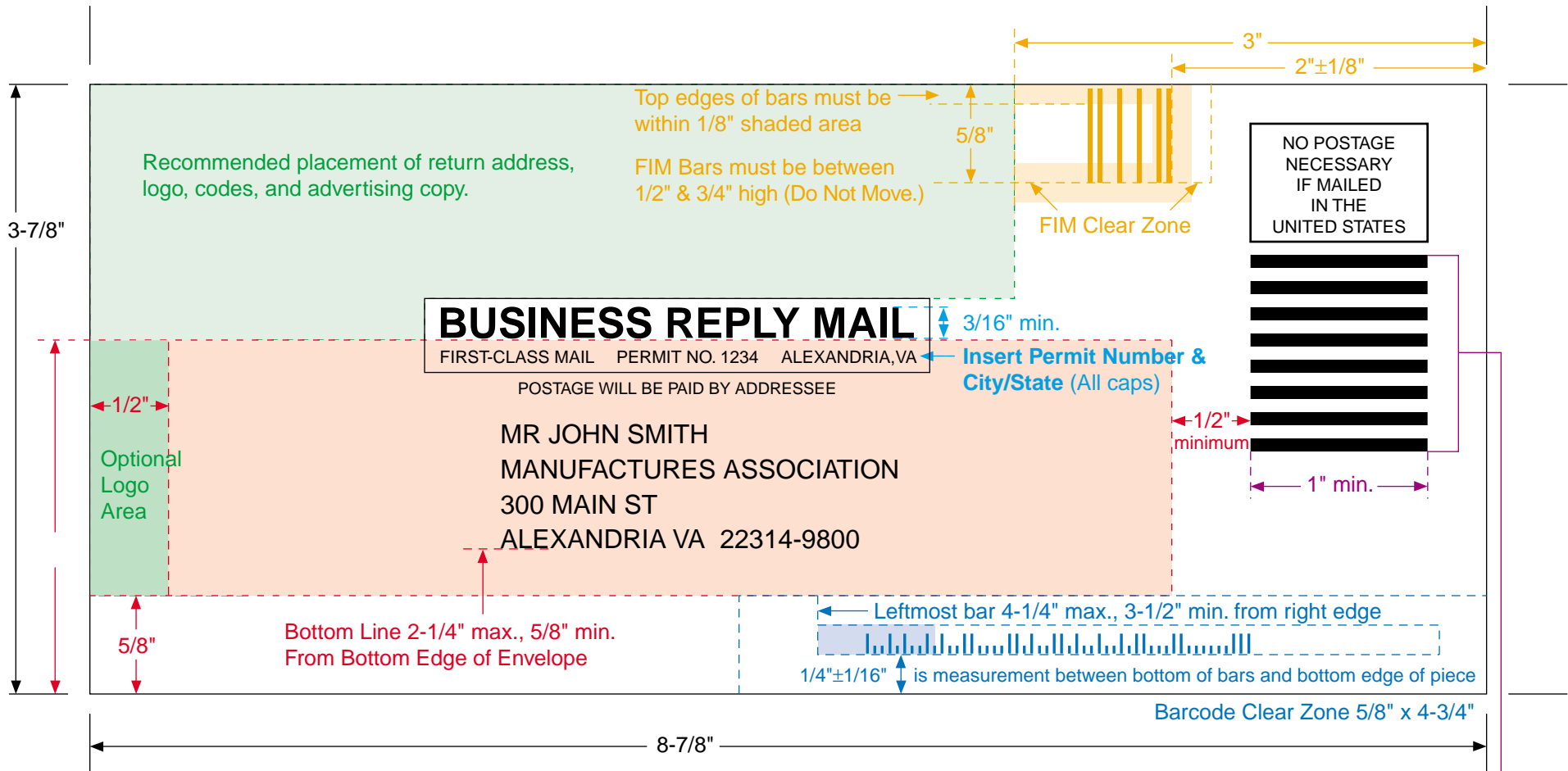
Dimensions Layer



Horizontal Bars must be 1/16" to 3/16" thick, evenly spaced, and at least 1" long. The bottom bar must be above the top of the delivery address line, see S922.5.7.

USPS BRM Template #8-5/8 Envelope 3-5/8" x 8-5/8"

Dimensions Layer



USPS BRM Template #9 Envelope 3-7/8" x 8-7/8"

Dimensions Layer

Horizontal Bars must be 1/16" to 3/16" thick, evenly spaced, and at least 1" long. The bottom bar must be above the top of the delivery address line, see S922.5.7.

Designing Letter and Reply Mail—Contents

Publication 25, July 2003

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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 initial 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

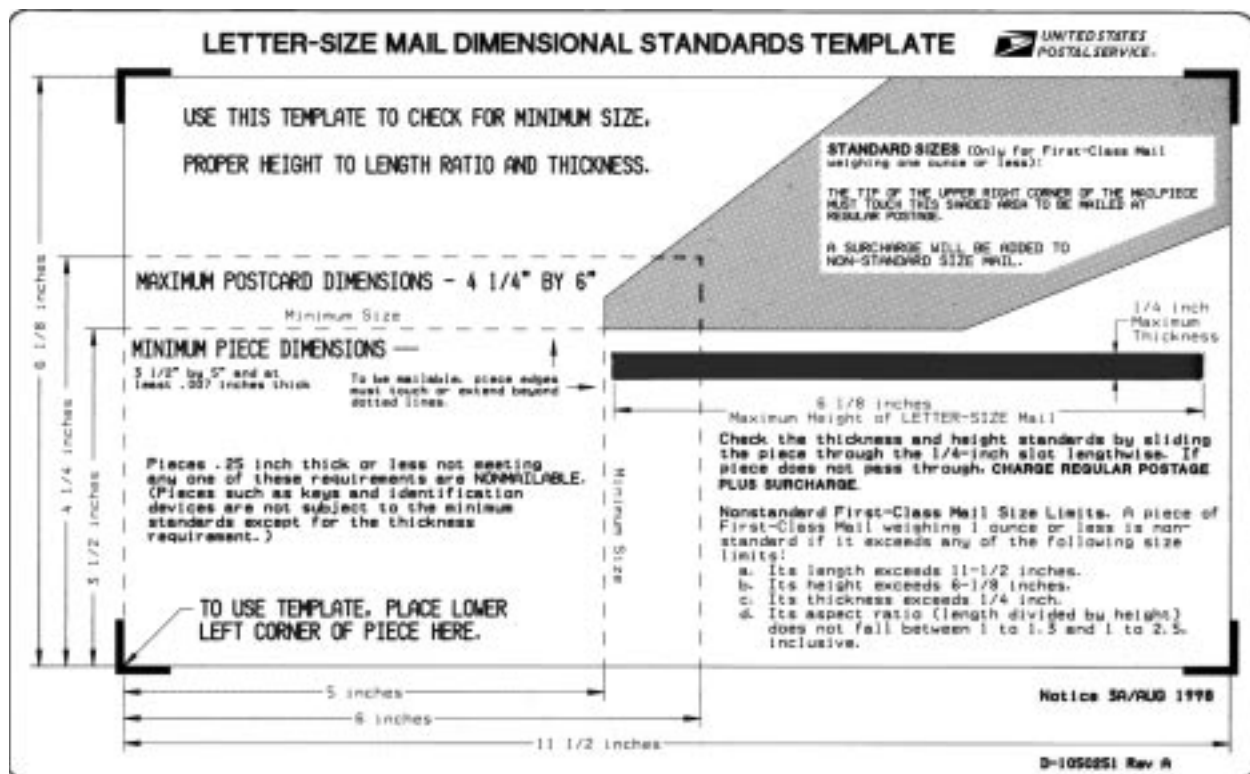
The templates and gauges described in the following sections are used to measure mailpieces for determining automation compatibility and readability. You can get these tools from your mailpiece design analyst, account representative, postal business center, post office, or on the web at www.usps.com.

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

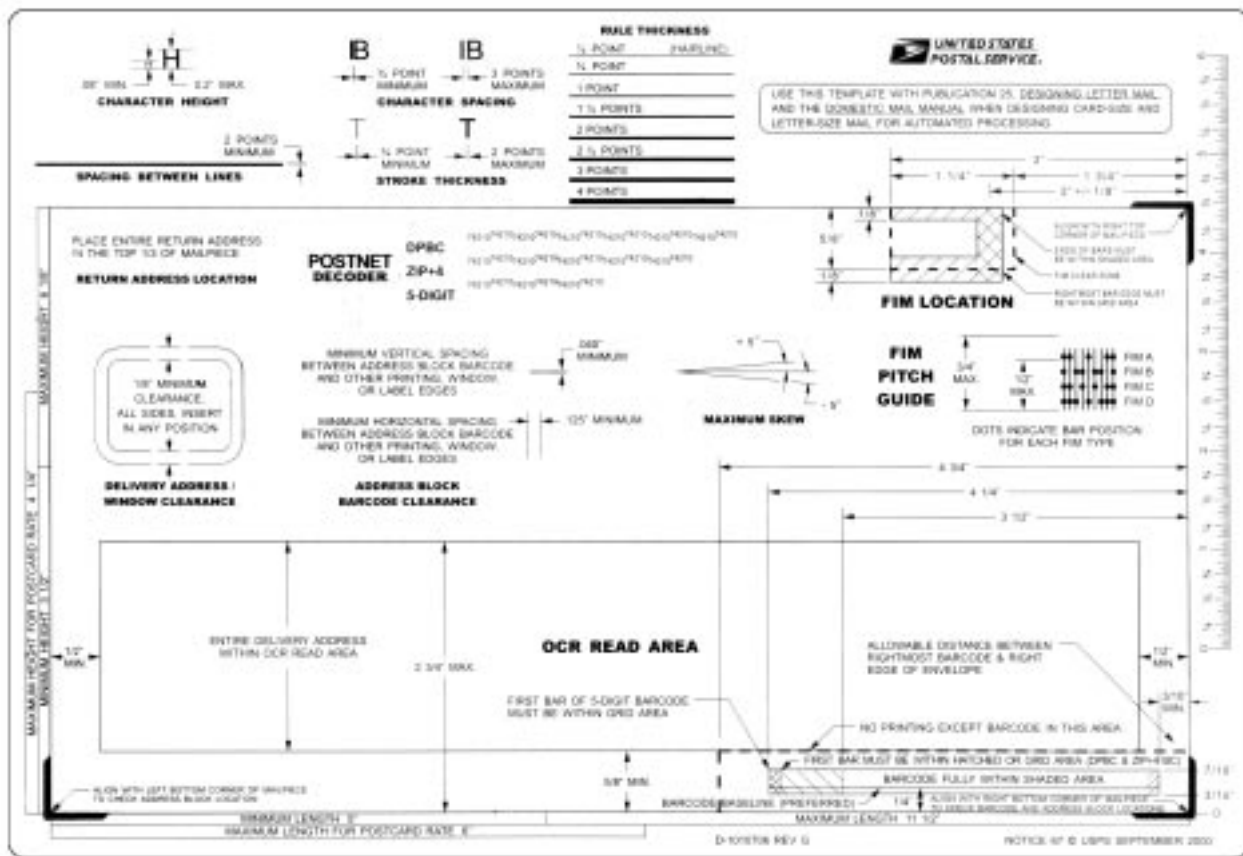
Notice 3-A, Letter-Size Mail Dimensional Standards Template
(not actual size)



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)

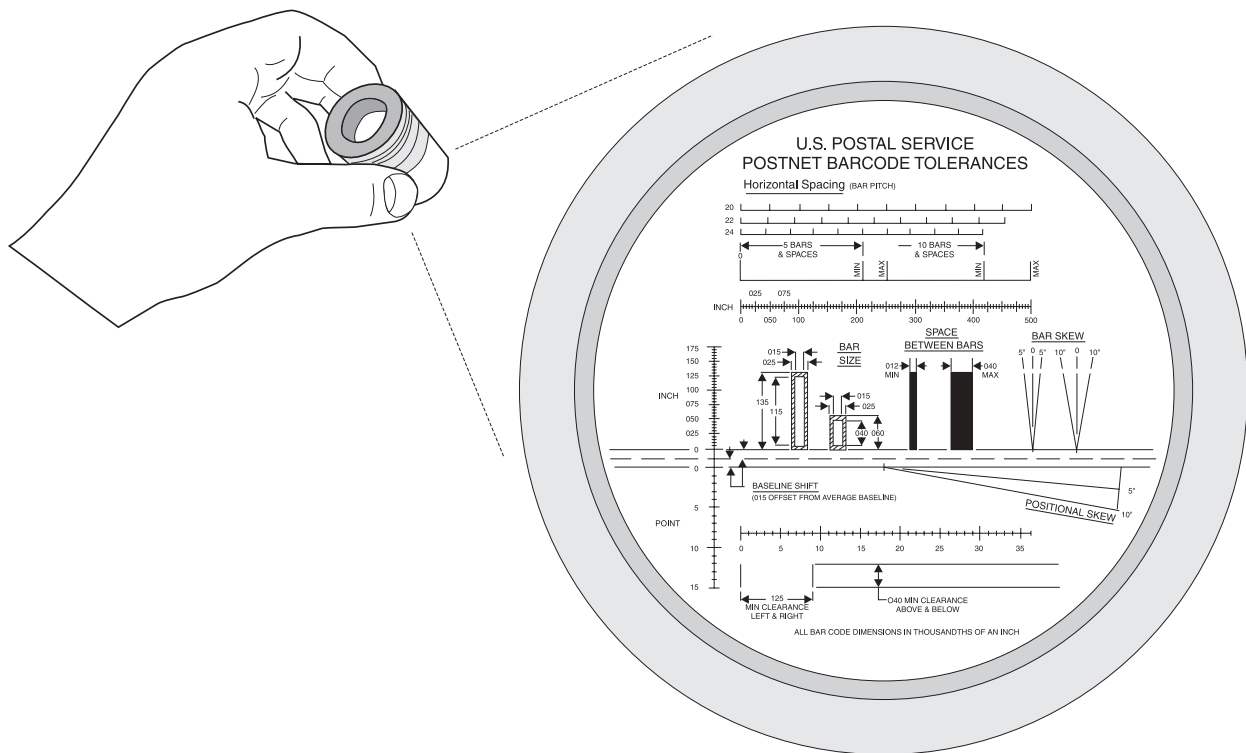


POSTNET Code Eyepiece With Reticle

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.

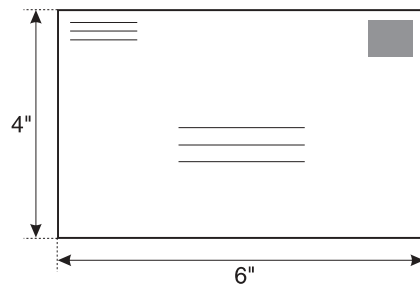
For letter-size mailpieces, the length is the dimension parallel to the address.

Exhibit 2-2

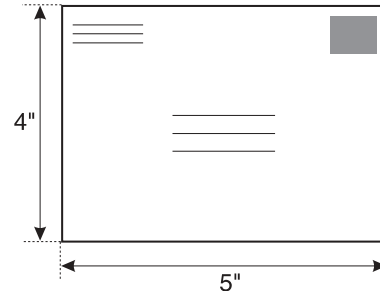
Aspect Ratio

(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.

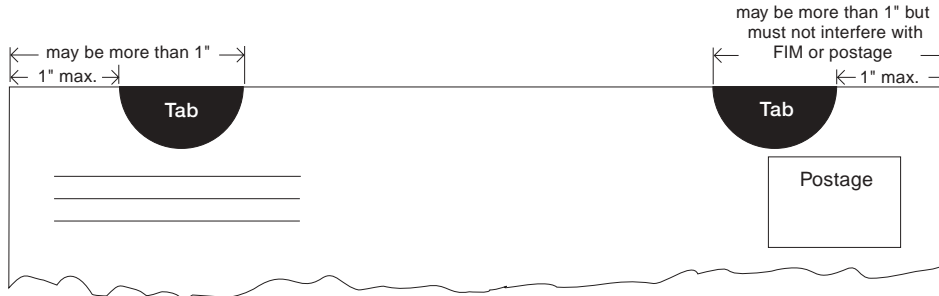
Booklets

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.

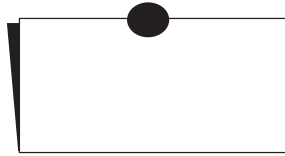
Exhibit 2-3
Folded Self-Mailers
(not drawn to scale)



Specifications for Automation-Compatible Letter-Size Mailpieces

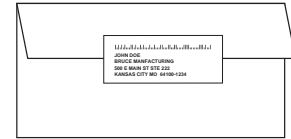
Double Postcard

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



Folded Self-Mailer
 (Invitation Fold)

Tab Address Label
 Folds Top and Bottom
 Sheets Multiple
 Basis Weight 20 lb.



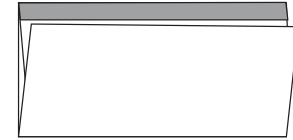
Folded Self-Mailer

Tabs 2 (start \leq 1 inch from edges)
 Folded Edge Top or Bottom
 Sheets Single
 Basis Weight 20 lb.



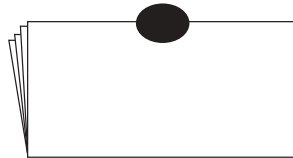
Folded Self-Mailer
 (Continuous Glue Strip)

Open Edge Top
 Folded Edge Bottom
 Sheets Single
 Basis Weight 20 lb.



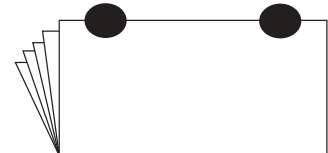
Folded Self-Mailer

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



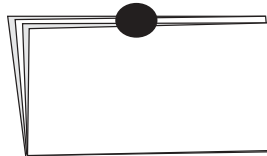
Booklet

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



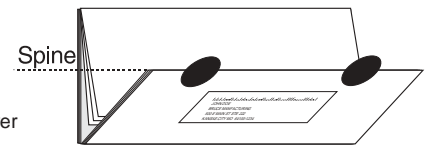
Folded Self-Mailer

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



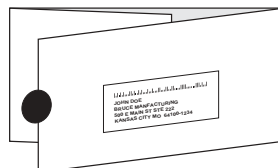
Folded Booklet

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



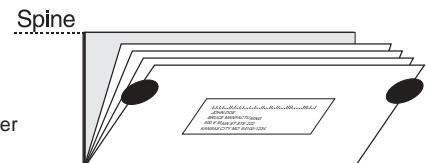
Folded Self-Mailer¹

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



Folded Booklet

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



Booklet

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



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.

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).

MLOCs 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)

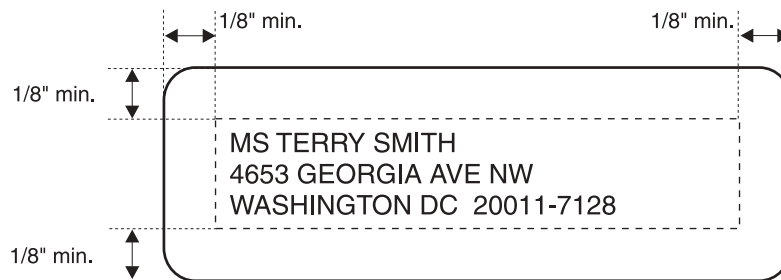
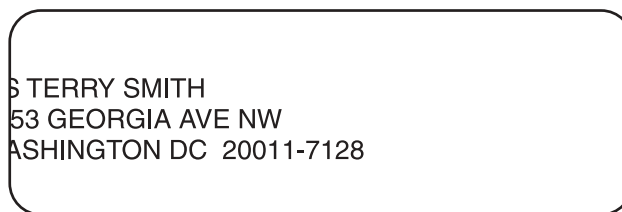


Exhibit 2-5
Excessive Address Insert Shift
(Not drawn to scale)



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

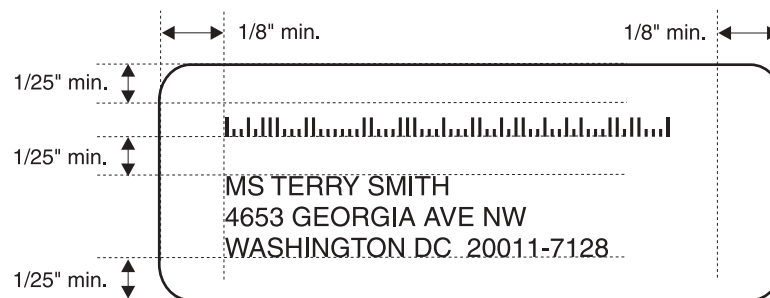
As with addresses, POSTNET barcodes printed on inserts—including POSTNET barcodes printed as the top or bottom line of the delivery address block—must maintain the following minimum clearances (see Exhibits 2-4 and 2-6):

- 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

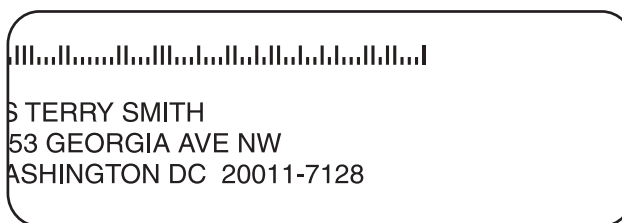
To test the horizontal insert shift of the barcode and window, do the following:

- 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 1/8 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:

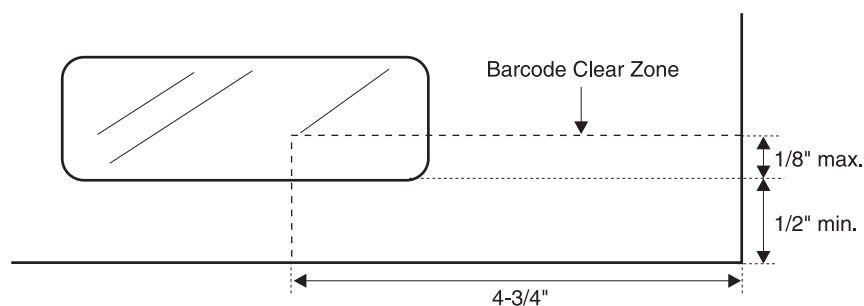
- A print contrast ratio (PCR) equal to or more than 40 percent in the red and green portions of the optical spectrum is necessary for an MLOCR to recognize address information (see Chapter 3).
- A print reflectance difference (PRD) equal to or more than 30 percent in the red and the green portions of 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 $\frac{1}{2}$ inch from the bottom edge of the envelope and may extend $\frac{1}{8}$ inch into the barcode clear zone (see Exhibit 2-8).

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



FASTforwardSM

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

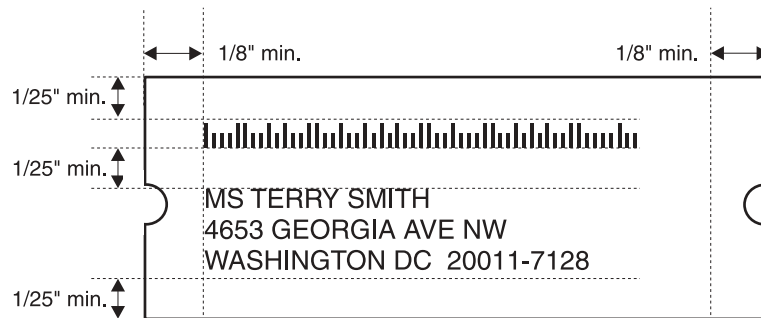
The following minimum clearances for the POSTNET barcode, when applied to address labels, are the same as the clearances required for barcoded inserts in window envelopes (see Exhibit 2-9):

- At least $\frac{1}{8}$ inch between the left and right of the barcode and the left and right edges of the label or other printing.
- At least $\frac{1}{25}$ 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.

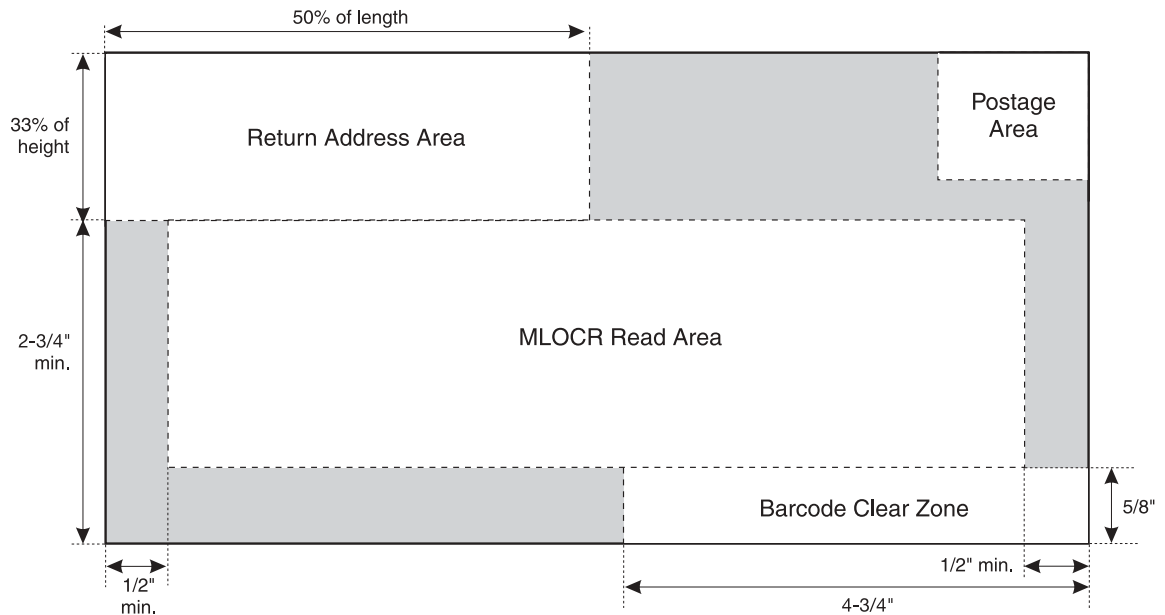
Address Block Location

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:

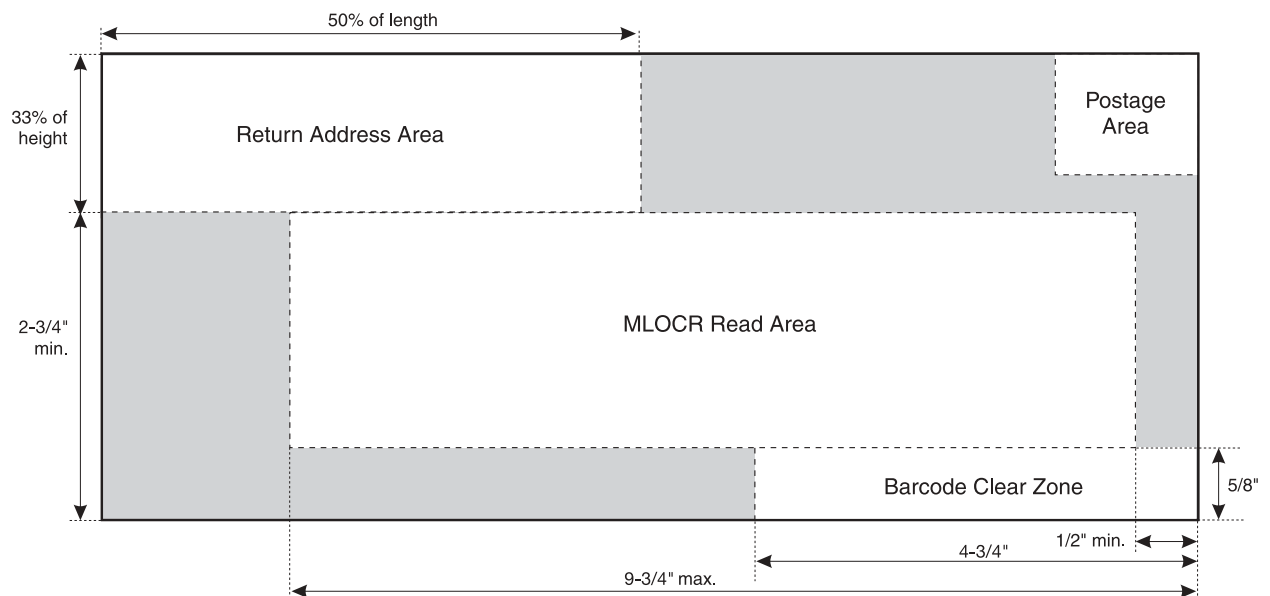
- The MLOCR read area requires only 1/2-inch margins on the left and right sides.
- The entire address (except the optional lines above the recipient line) should appear within an imaginary rectangle that extends from 5/8 inch to 2-3/4 inches from the bottom edge of the mailpiece, with 1/2-inch margins 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



Mailpiece clear zones (unshaded), for pieces more than 10 1/2 inches long



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

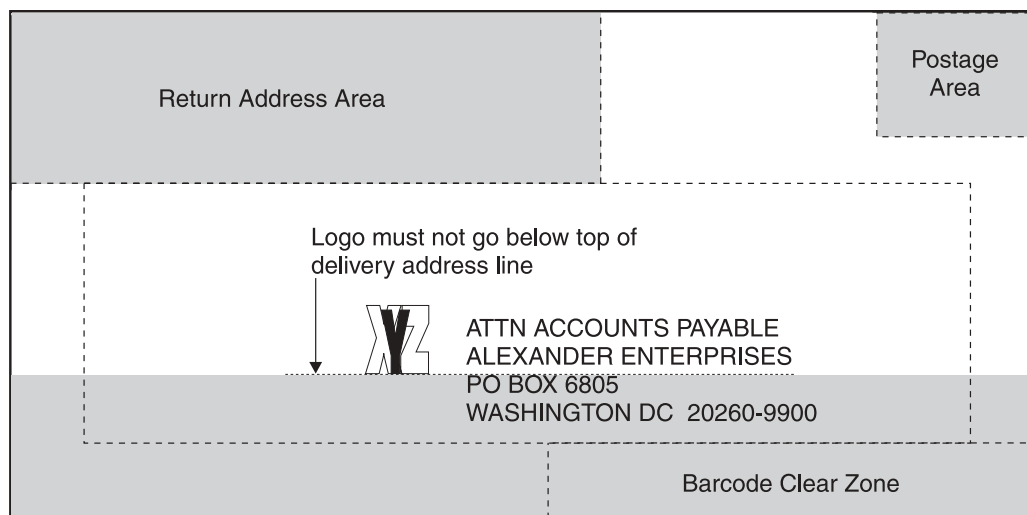
Extraneous (nonaddress) printing in the MLOCR read area can confuse MLOCR scanners and prevent them from interpreting the address information correctly. This can cause them to reject the mailpiece.

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— $\frac{5}{8}$ inch high by $4\frac{3}{4}$ 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	<i>Italic</i>
EXTENDED	<i>Stylized</i>
CONDENSED	<i>Script</i>

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

3
6
9

Preferred



Not Recommended

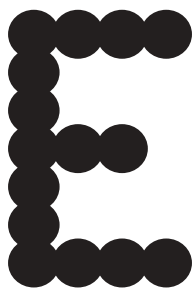
Dot Matrix Characters

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).

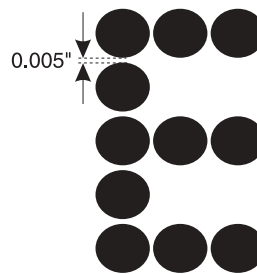
Exhibit 3-5

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)

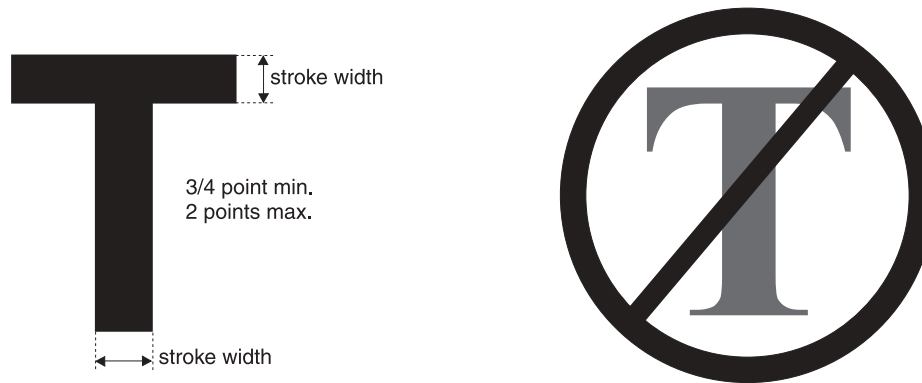
12 Points (Preferred)

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)



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).

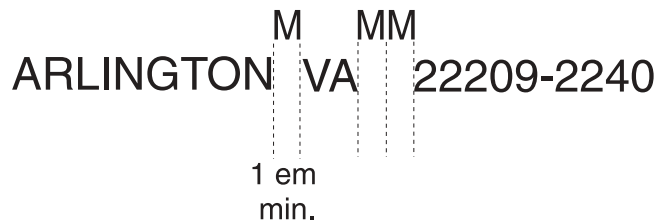
Exhibit 3-8
Character Spacing
(not drawn to scale)



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)



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.

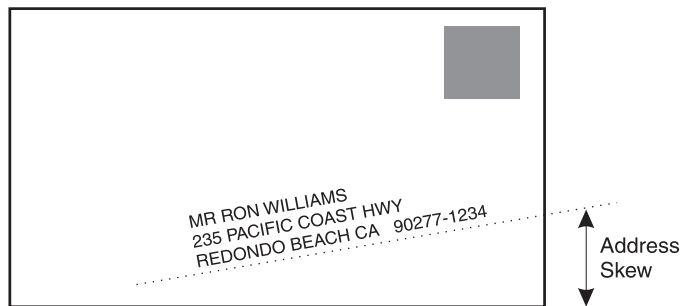
Exhibit 3-10
Line Spacing
(not drawn to scale)



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

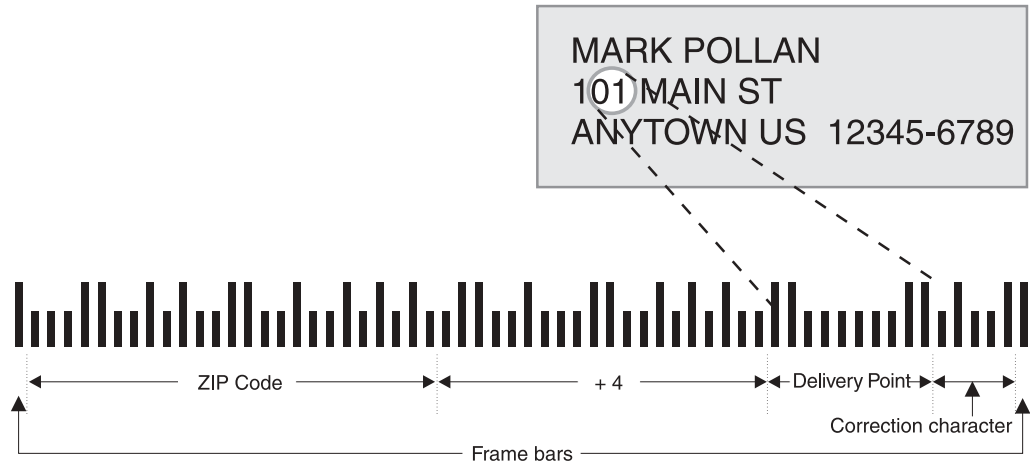
The POSTNET (POSTal Numeric Encoding Technique) barcode was developed by the Postal Service to encode ZIP Code information on letter mail for rapid and reliable sorting by BCSs. The POSTNET barcode can represent a five-digit ZIP Code (32 bars), a nine-digit ZIP+4 code (52 bars), or an eleven-digit delivery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



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).

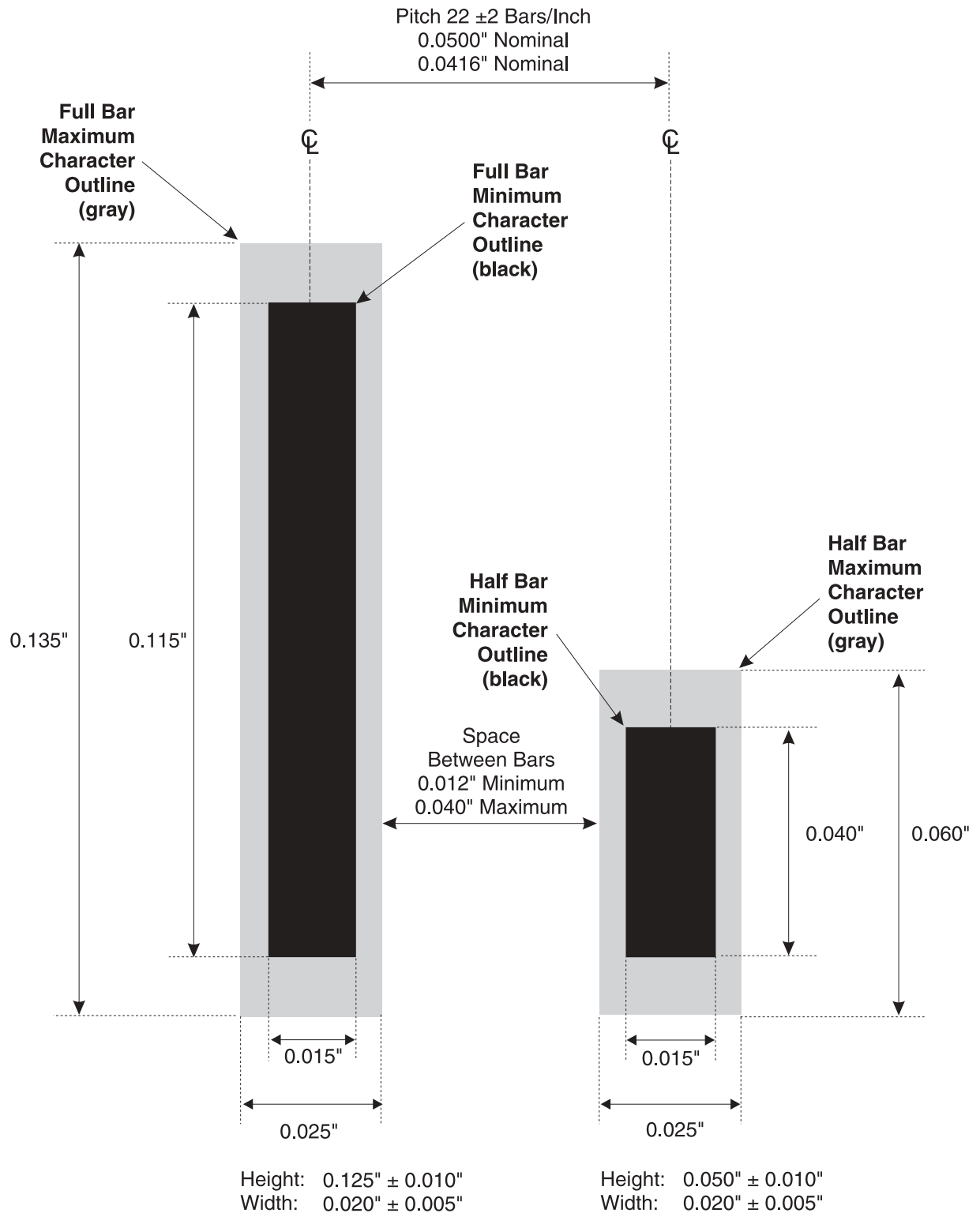
Nine-Digit ZIP+4 Code (52 Bars)

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)

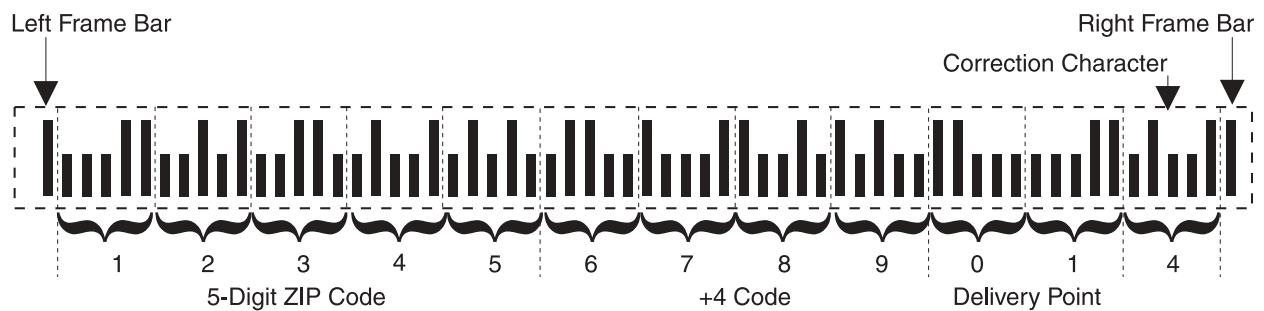


Decoding POSTNET Barcodes

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)













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	Barcode Value
	7 4 2 1 0	74210
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.

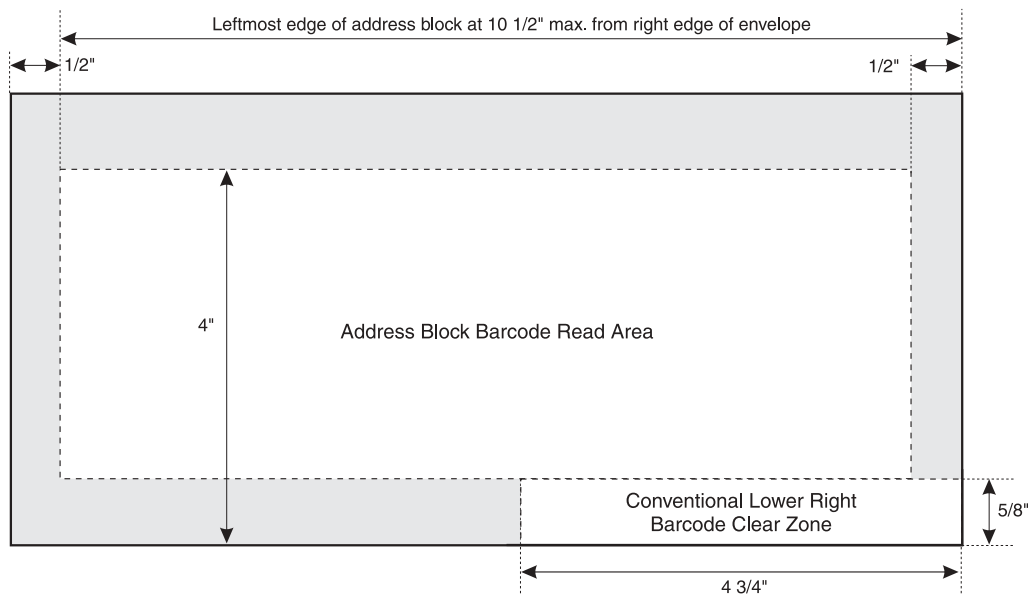
Barcode Locations

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)



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.

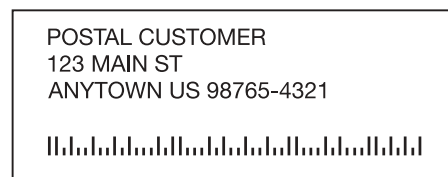
Exhibit 4-6

Address Block Barcode Placement Options (not drawn to scale)

Example A
Above Address
(Preferred)
Example C



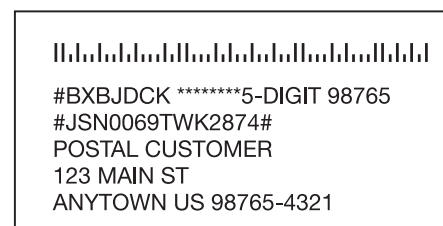
Example B
Below Address
(Acceptable)
Example D



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



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



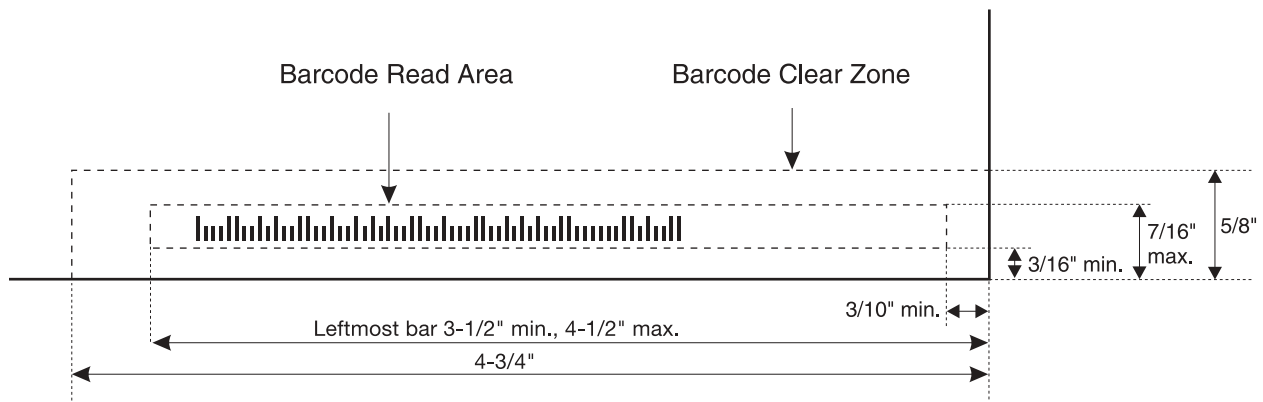
You may not apply the POSTNET barcode anywhere between the recipient line and the city, state, and ZIP Code line of the address (that is, do not place the barcode between any lines of the delivery address). Chapter 2 provides specifications for the clearance needed between address block barcodes and 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 Layout

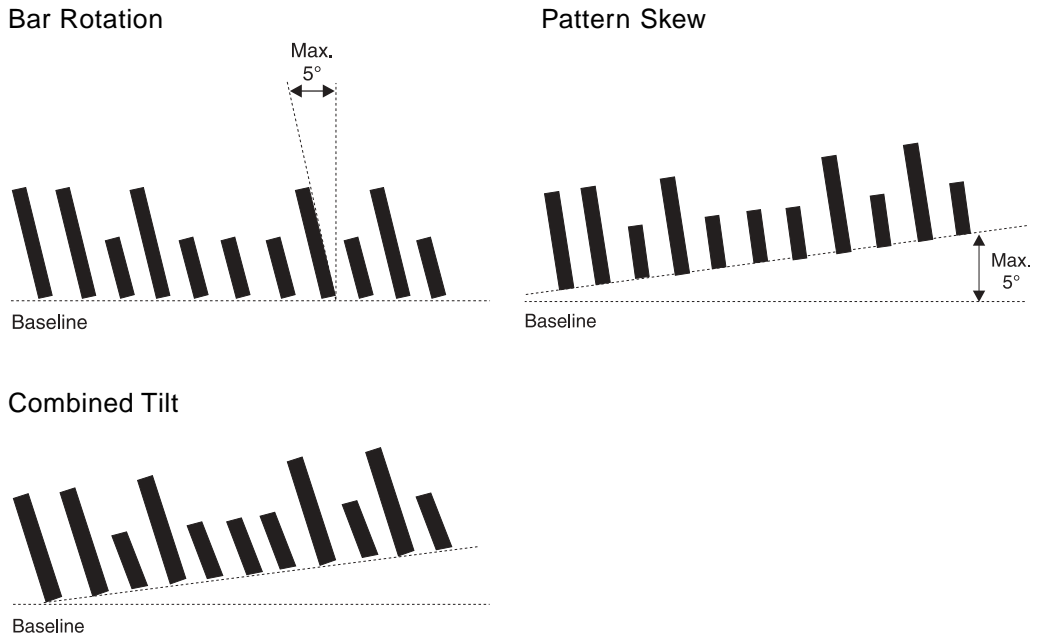
Bar Tilt

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.

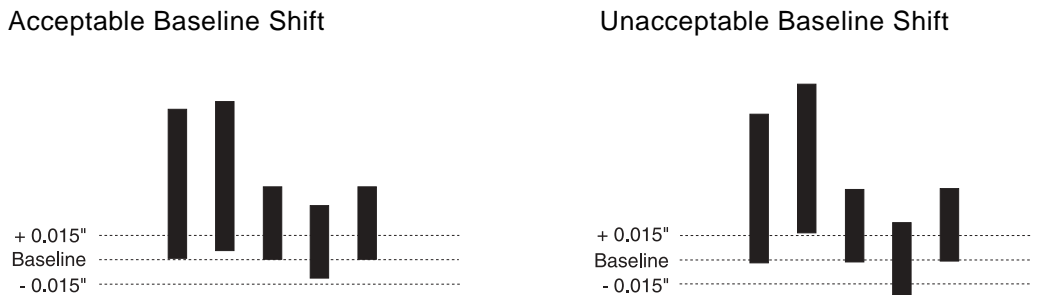
Exhibit 4-8
Bar Tilt
(not drawn to scale)



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)



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)



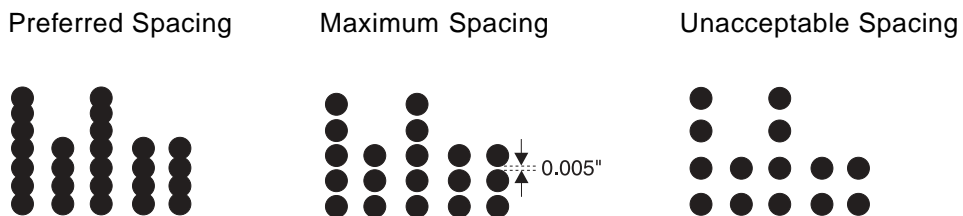
Voids

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)



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)

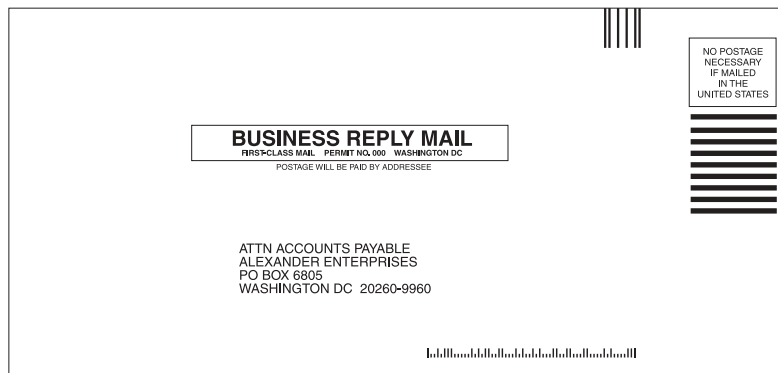
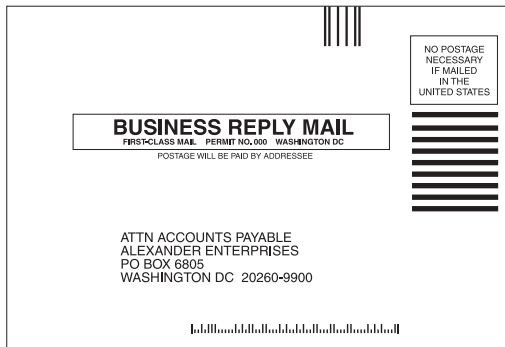
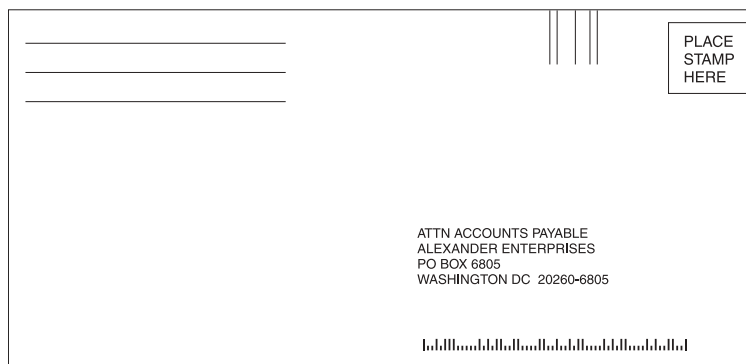
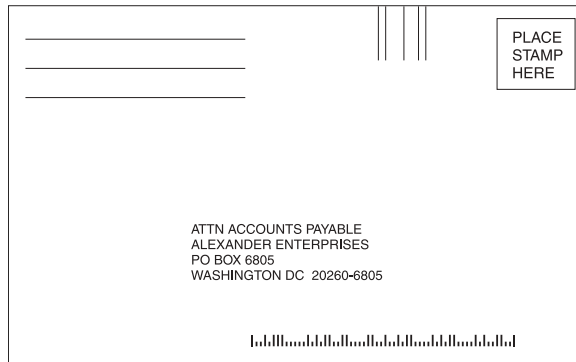


Exhibit 5-2
CRM Postcard and Envelope
(not drawn to scale)



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.

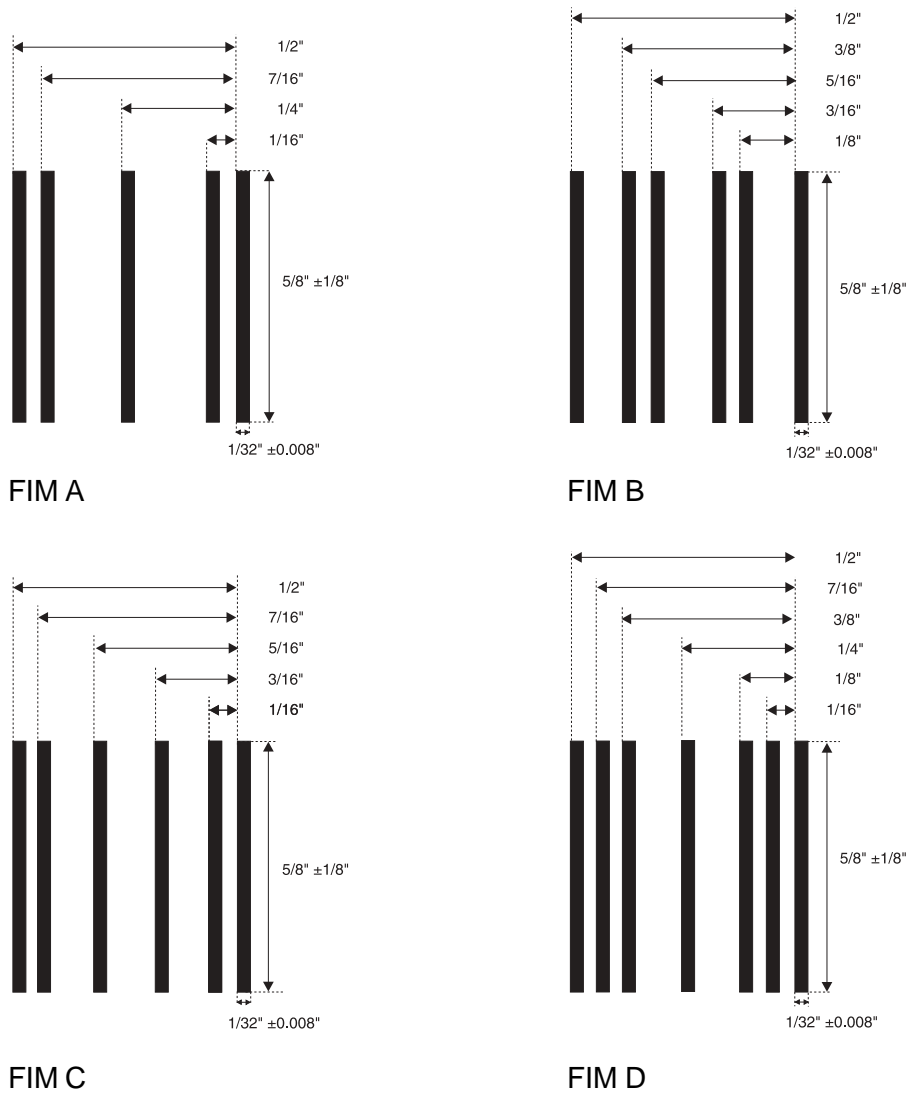
Use

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)

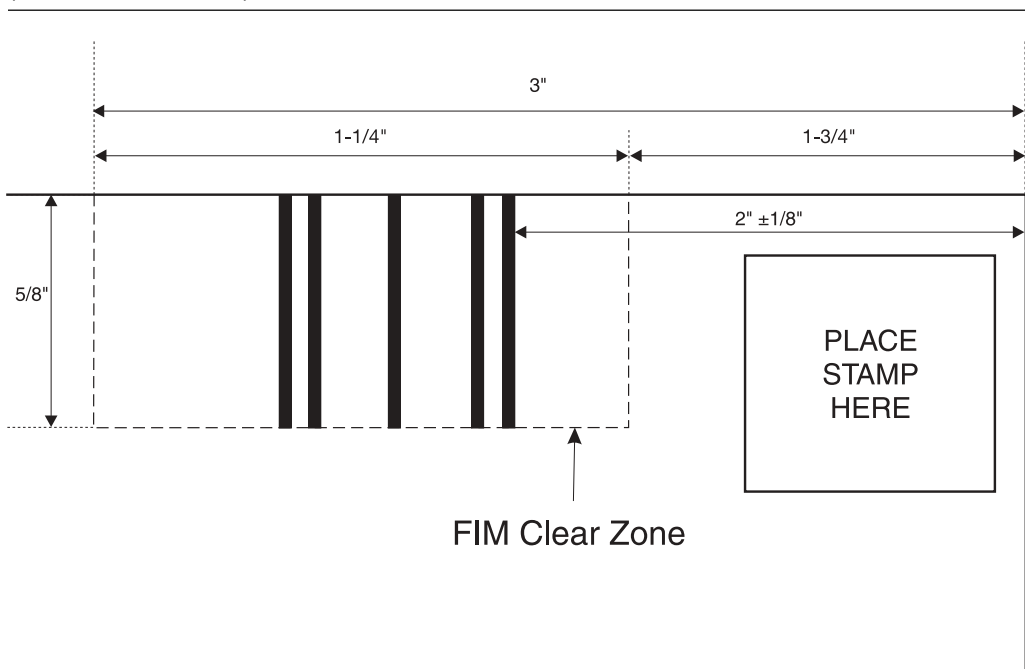


FIM Standards

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 $\pm 1/8$ inch from the right edge of each mailpiece.
- The FIM bars must be $5/8$ inch high $\pm 1/8$ 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)



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 $\frac{5}{8}$ 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.

QC 007-002-001-71



ALIGN WITH LOWER LEFT CORNER

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.

QC 007-002-001-71



ALIGN WITH LOWER LEFT CORNER

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 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

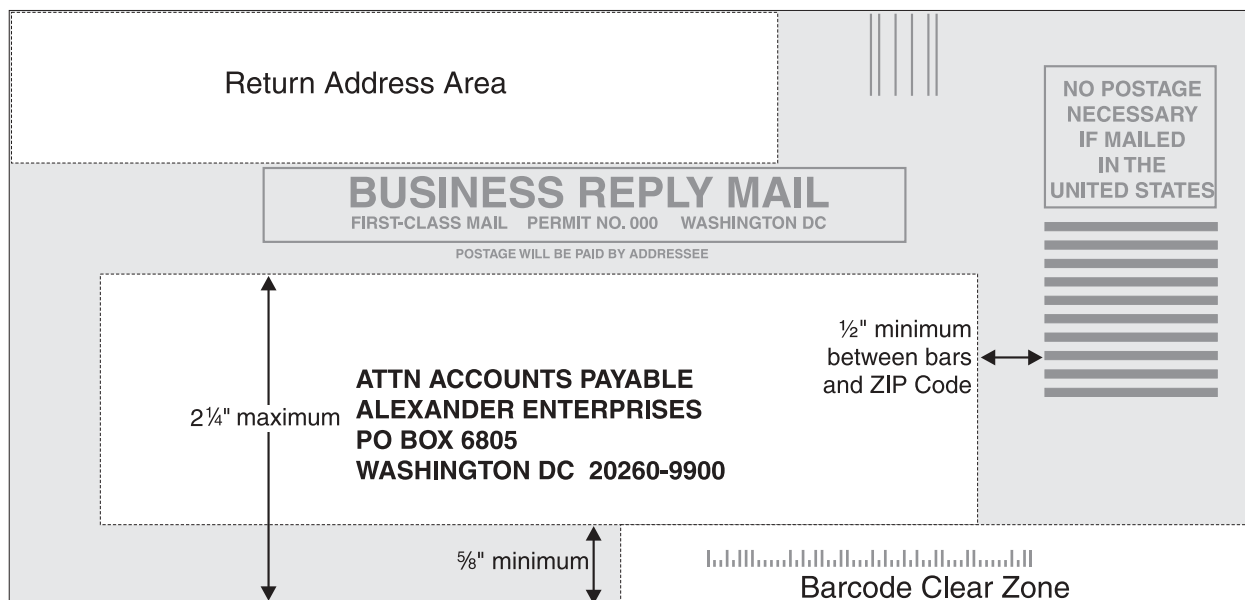
You must use a complete delivery address on your BRM pieces. This address includes the name of the BRM permit holder, delivery address, city, state, and ZIP Code (see Exhibit 6-6). For letter-size pieces, all delivery address lines must appear within the MLOCR read area (see Exhibits 3-1 and 6-6).

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)



Element 6: Barcode Clear Zone

You must maintain a clear zone for barcodes on your BRM pieces. This clear zone must measure $\frac{5}{8}$ inch from the bottom edge and $4\text{-}\frac{3}{4}$ 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 $3\text{-}\frac{1}{2}$ inches and $4\text{-}\frac{1}{4}$ inches from the right edge of the piece.
- Vertically, the barcode must be within the area between $\frac{3}{16}$ inch and $\frac{7}{16}$ inch from the bottom edge of the piece; the bottom of the bars must be $\frac{1}{4}$ inch $\pm\frac{1}{16}$ 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)

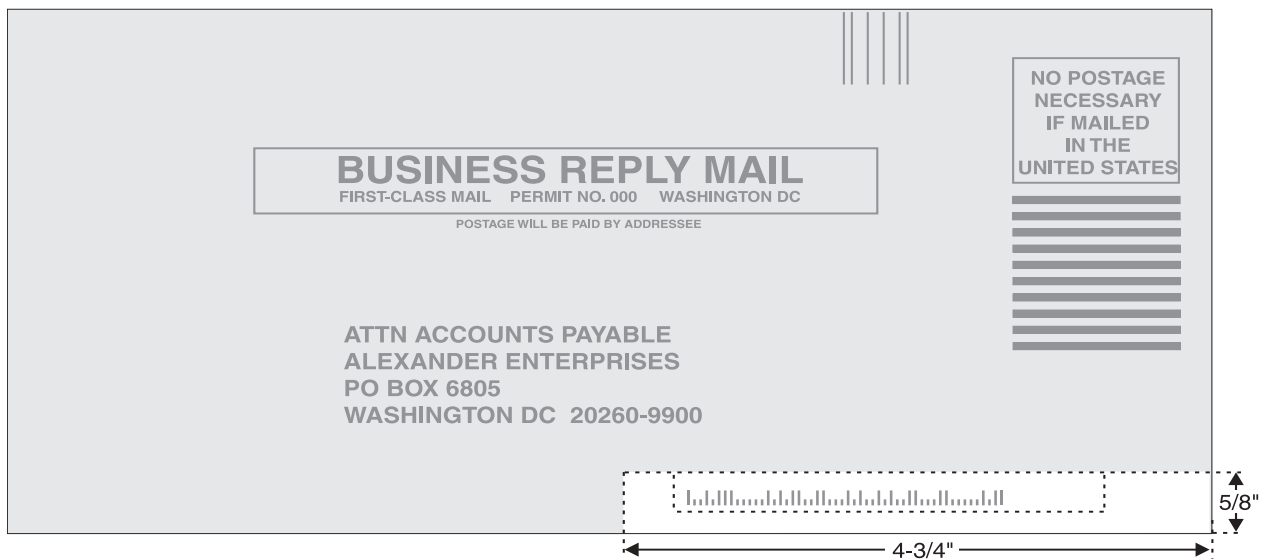
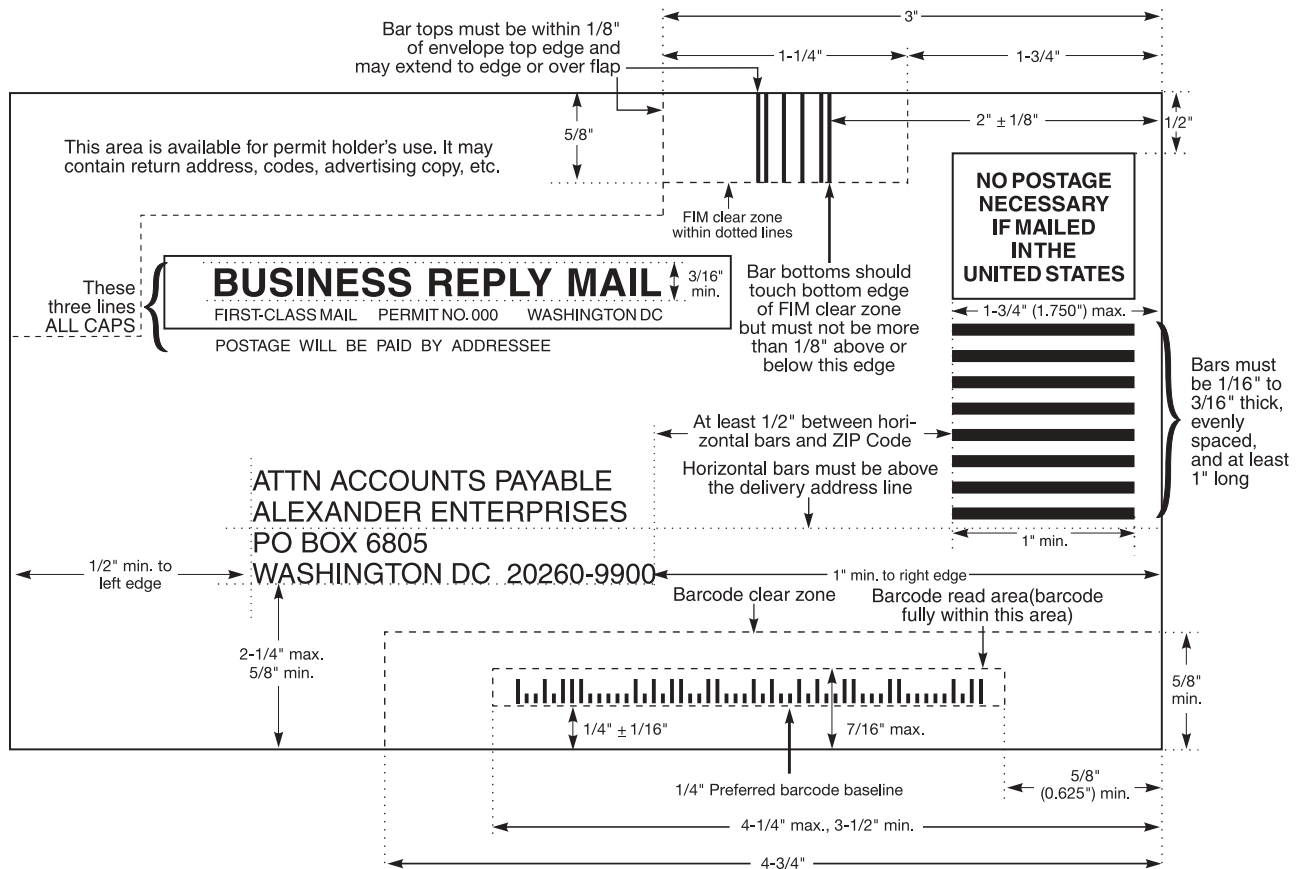


Exhibit 6-8 summarizes the specifications for BRM elements and dimensions.

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—		—Letter—	
	Minimum	Maximum ¹	Minimum	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

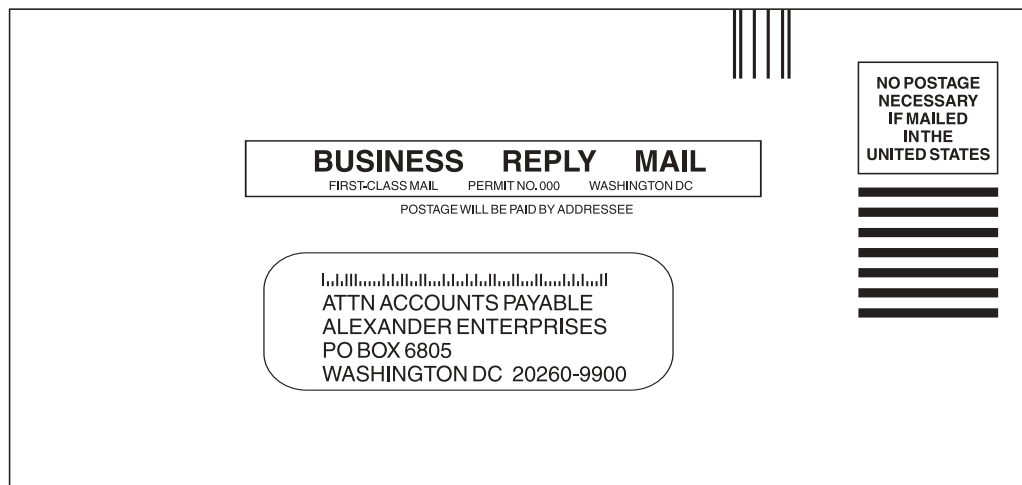
General Requirement

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

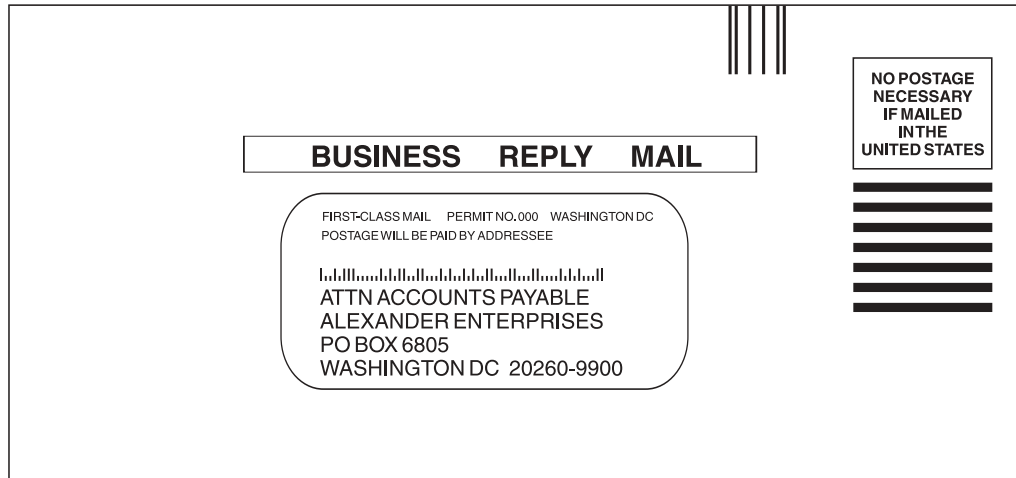
(not drawn to scale)



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)



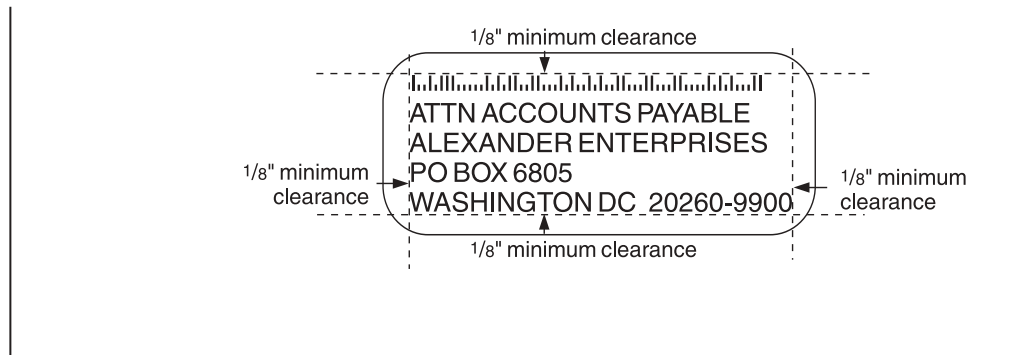
Address Visibility

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.

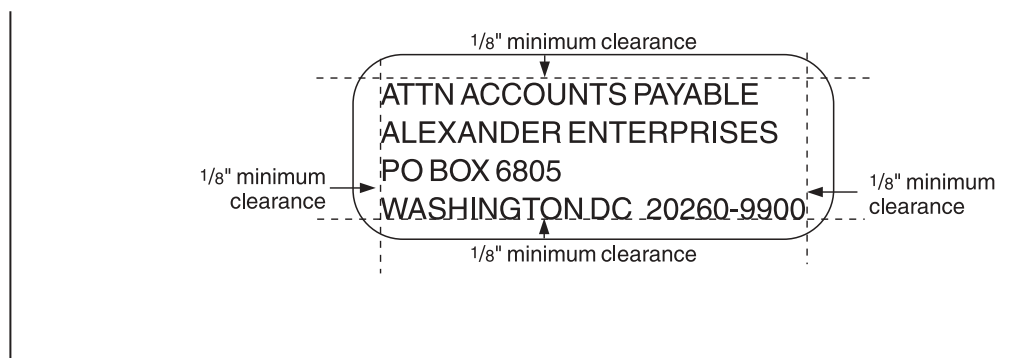
No printing other than the elements already listed under "Format" may be visible through the window. The address must be readable through any window-covering material. The address and barcode must appear within the standards shown in Exhibits 6-11 and 6-12.

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

Address clearance in window with barcode



Address clearance in window without barcode



Excessive insert shift



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.

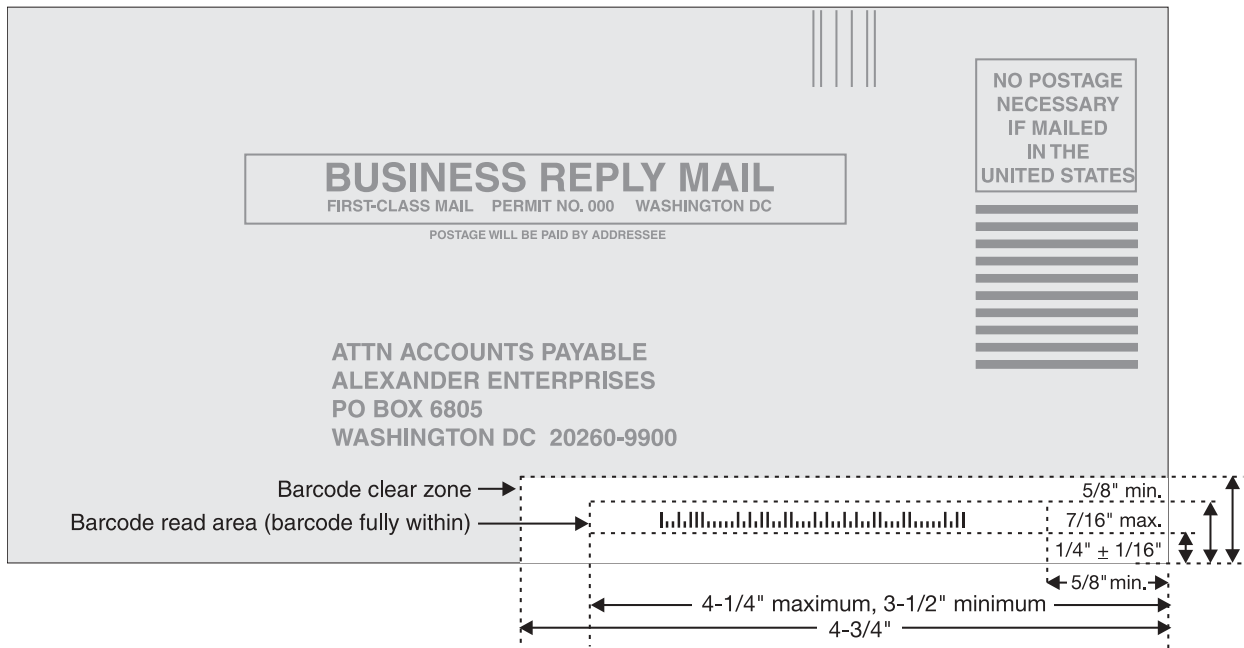
Barcode

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 $\frac{5}{8}$ 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

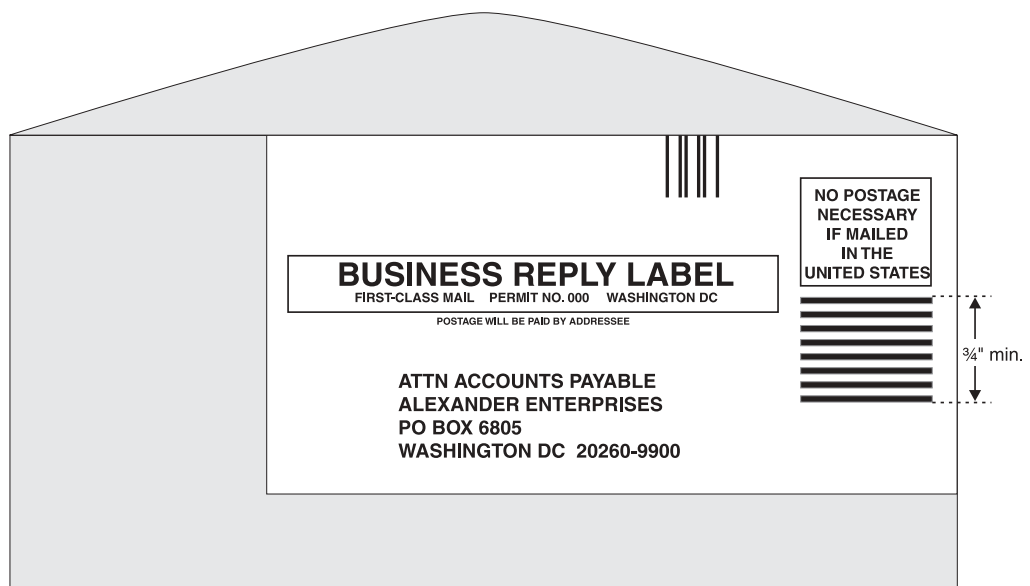
A business reply label is an adhesive label that meets the BRM label criteria. You (the sender) provide the label to your customers and they (the respondents) affix them to their own envelopes.

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

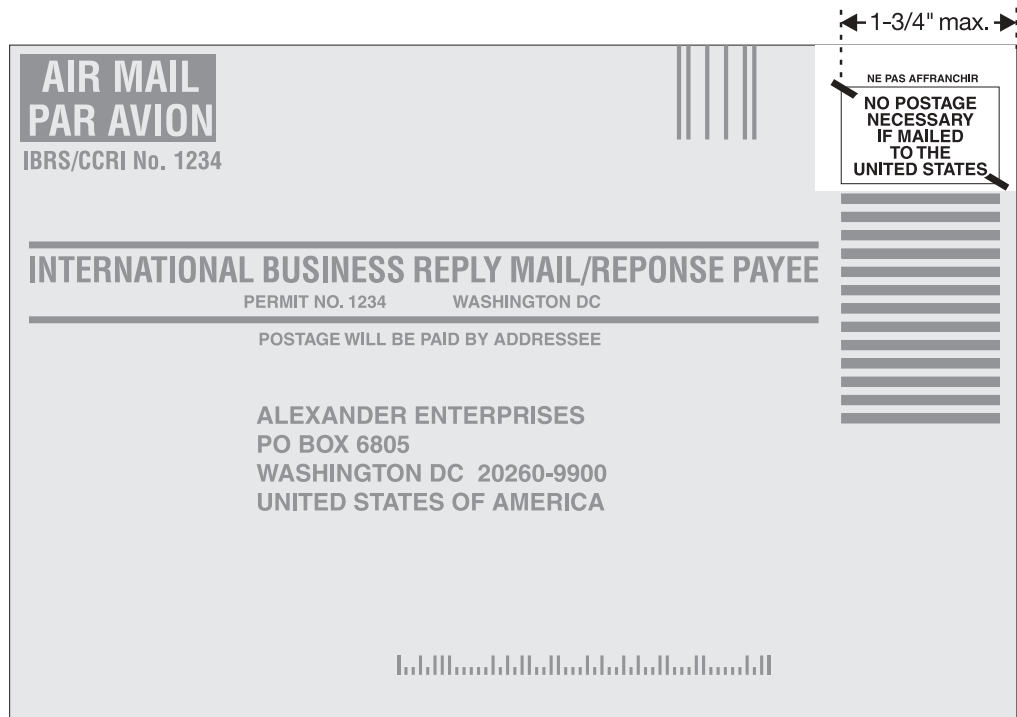
If you use window envelopes, make sure that all windows are covered with a nontinted, transparent material. You may not use open (noncovered) windows for IBRS.

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.

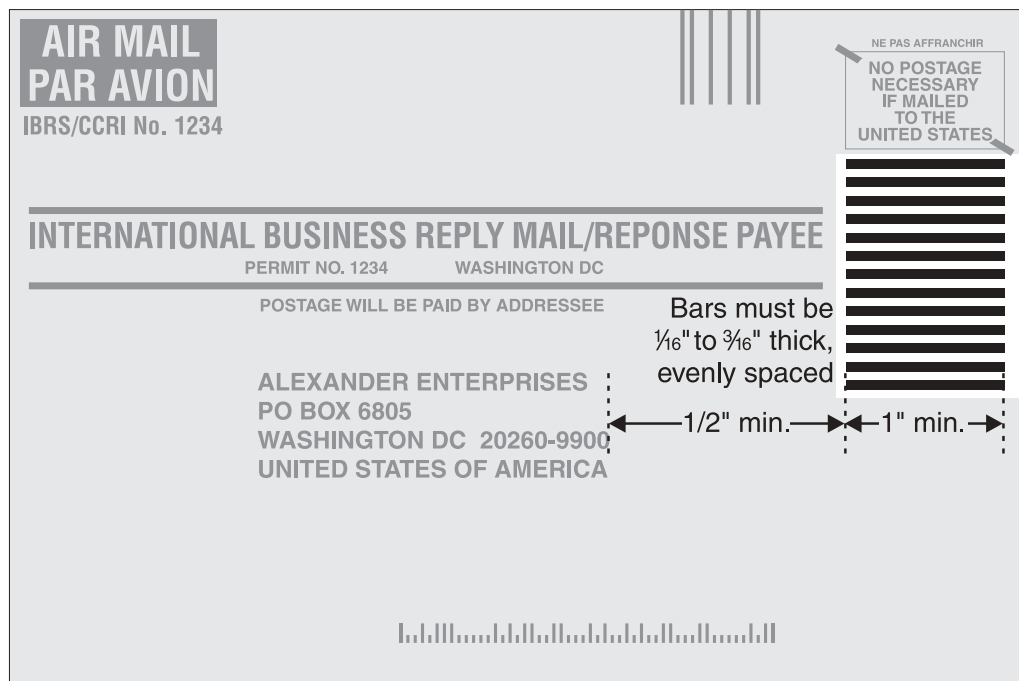
The bars must not extend below the delivery address line (the line above the city, state, and ZIP+4 line). The left edge of the bars may be no more than 1-3/4 inches from the right edge of the IBRS piece (see Exhibit 6-22).

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)



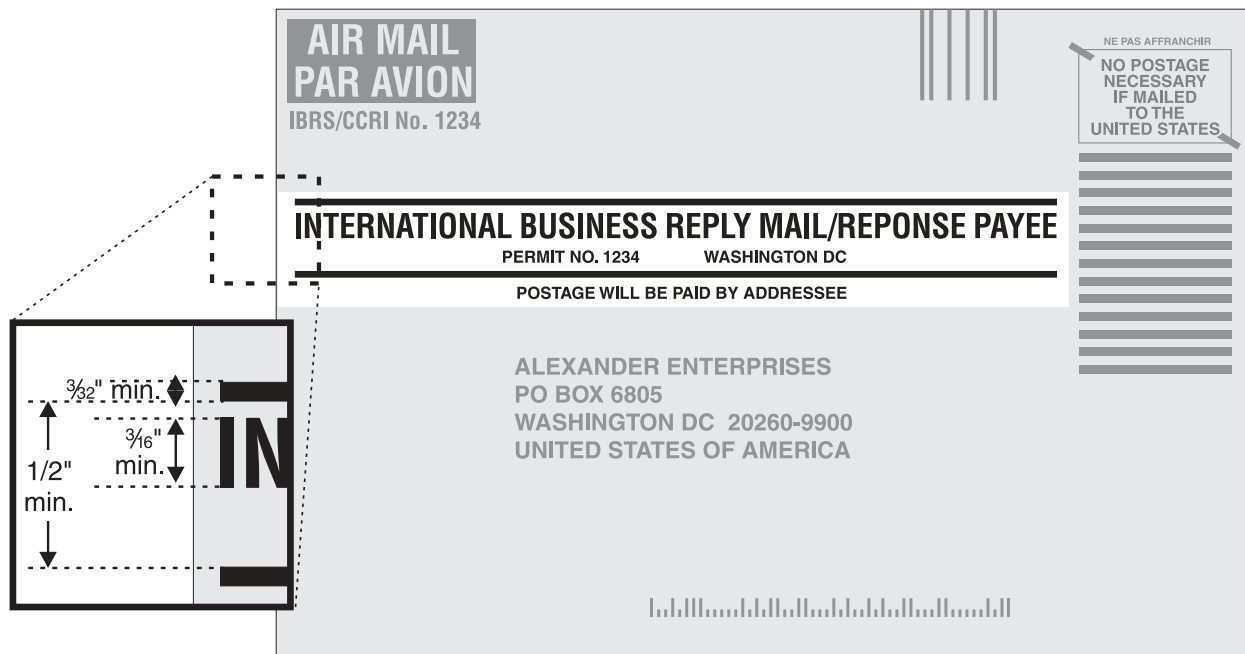
Legend, Number, and Endorsement

You must place, in capital letters, the business reply legend “INTERNATIONAL BUSINESS REPLY MAIL/RESPONSE 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

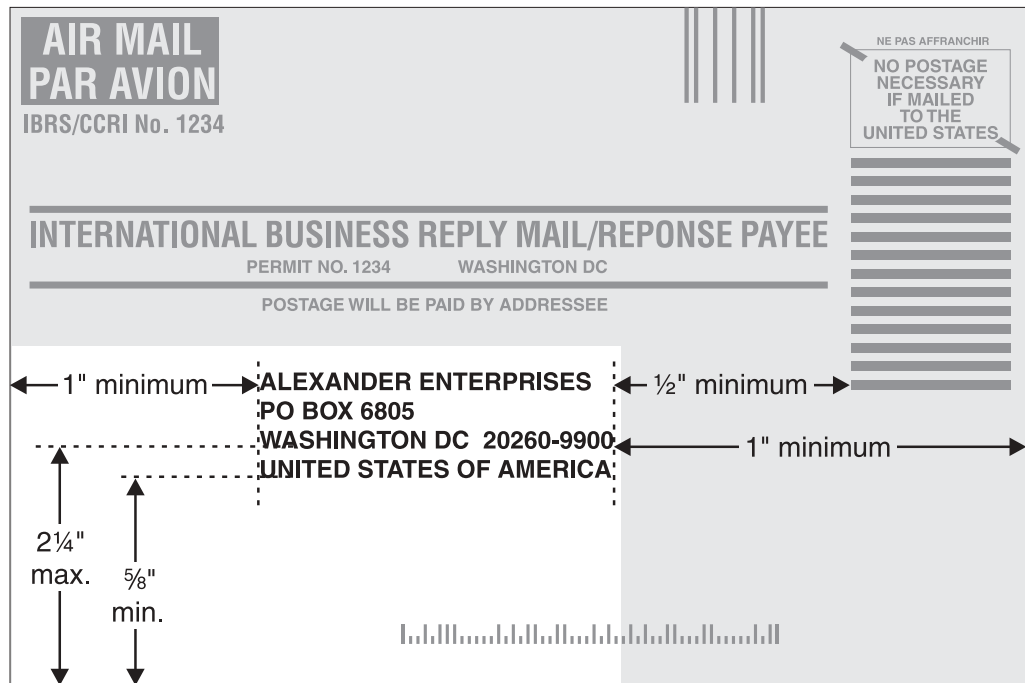
You must print a complete delivery address that includes the unique ZIP+4 code and "UNITED STATES OF AMERICA" (in capital letters) as the destination country (see Exhibit 6-24). The bottom line of the address must be no less than 5/8 inch from the bottom edge of your IBRS piece. The line for city, state,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

The diagram shows a rectangular envelope with a light gray background. In the top left corner, there is a black rectangular box with white text that reads "AIR MAIL PAR AVION" in a bold, sans-serif font. Below this box, the text "IBRS/CCRI No. 1234" is printed in a smaller font. In the top right corner, there are four vertical bars of varying heights. To the right of these bars is a rectangular box containing the text "NE PAS AFFRANCHIR" at the top, followed by "NO POSTAGE NECESSARY IF MAILED TO THE UNITED STATES" in a larger font. Below this box are several horizontal bars of varying lengths. In the center of the envelope, the text "INTERNATIONAL BUSINESS REPLY MAIL/REPOSE PAYEE" is printed in a large, bold, sans-serif font. Below this, the text "PERMIT NO. 1234 WASHINGTON DC" is printed in a smaller font. Below that, the text "POSTAGE WILL BE PAID BY ADDRESSEE" is printed in a smaller font. In the bottom center of the envelope, the recipient's address is printed: "ALEXANDER ENTERPRISES", "PO BOX 6805", "WASHINGTON DC 20260-9900", and "UNITED STATES OF AMERICA". At the very bottom center of the envelope, there is a long, horizontal barcode consisting of many small vertical bars of varying heights.

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)

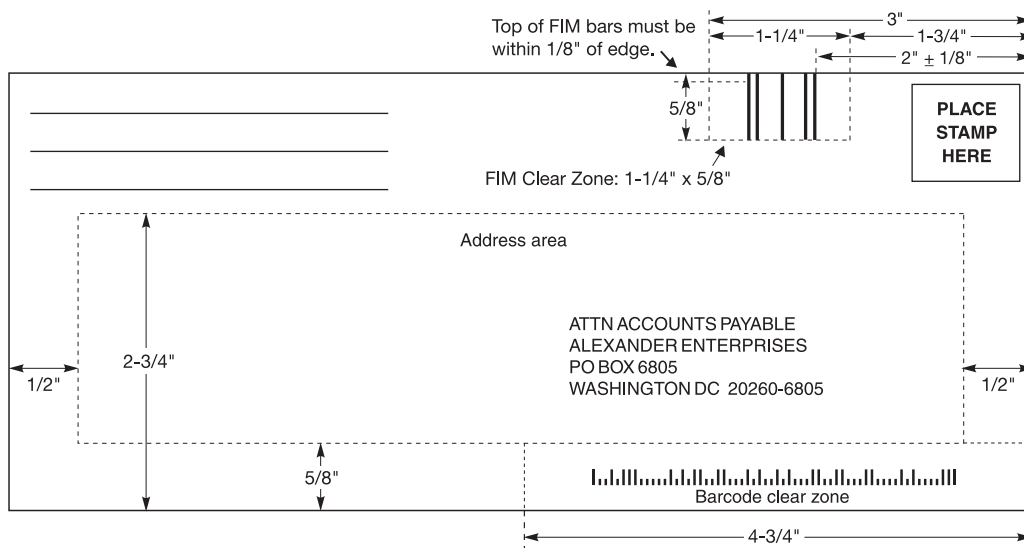


Exhibit 7-2a
CRM Envelopes
 (not drawn to scale)

CRM Envelope with Barcode in Barcode Clear Zone

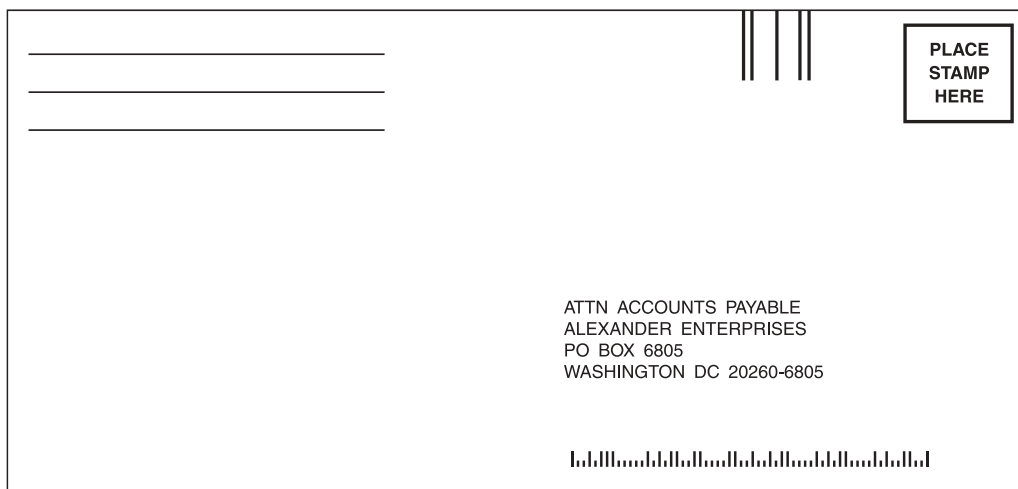


Exhibit 7-2b
CRM Envelopes
(not drawn to scale)

CRM Envelope with Barcode in Address Block

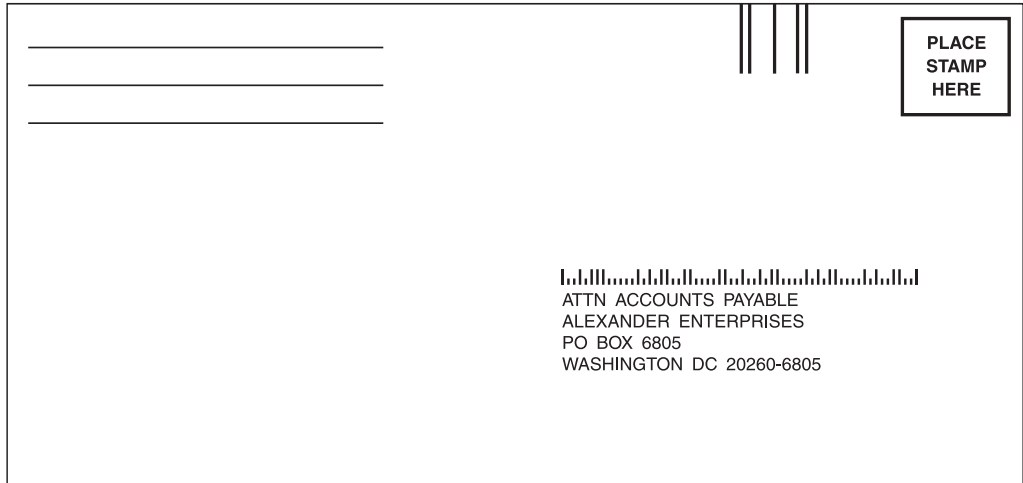
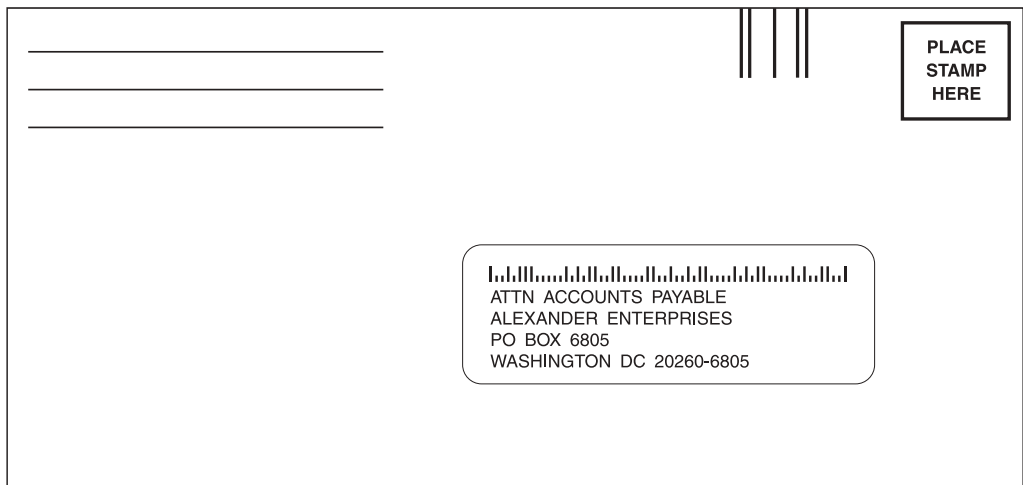


Exhibit 7-2c
CRM Envelopes
(not drawn to scale)

CRM Window Envelope with Barcode in Address Block



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 Dimension	—Card—		—Letter*—	
	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)

<p>_____</p> <p>_____</p> <p>_____</p>	<p> </p>	<p>PLACE STAMP HERE</p>
<p>ATTN ACCOUNTS PAYABLE ALEXANDER ENTERPRISES PO BOX 6805 WASHINGTON DC 20260-6805</p>		
<p> </p>		

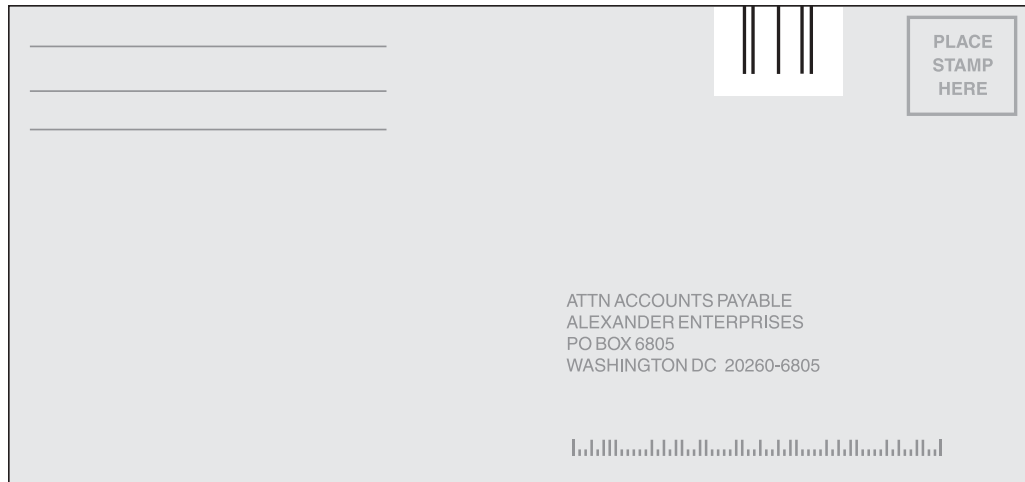
Facing Identification Mark

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

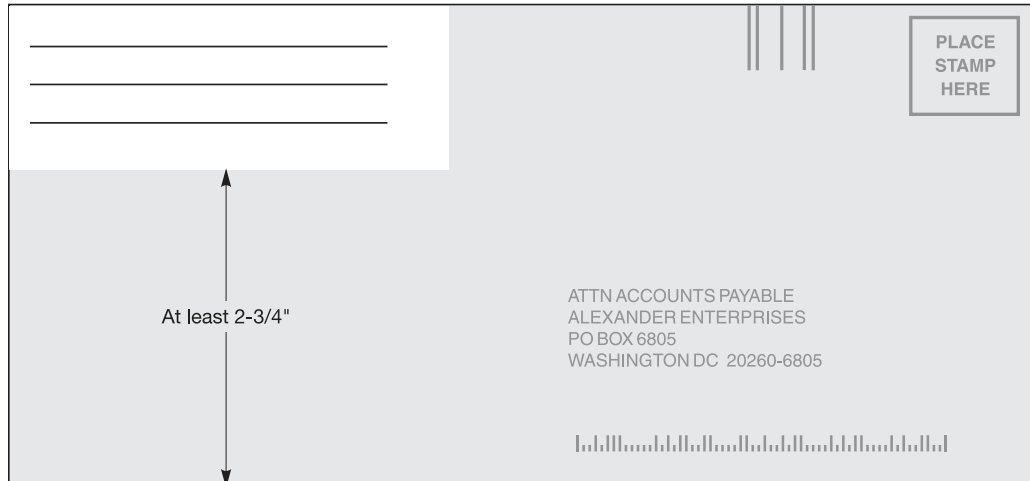
(not drawn to scale)



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).

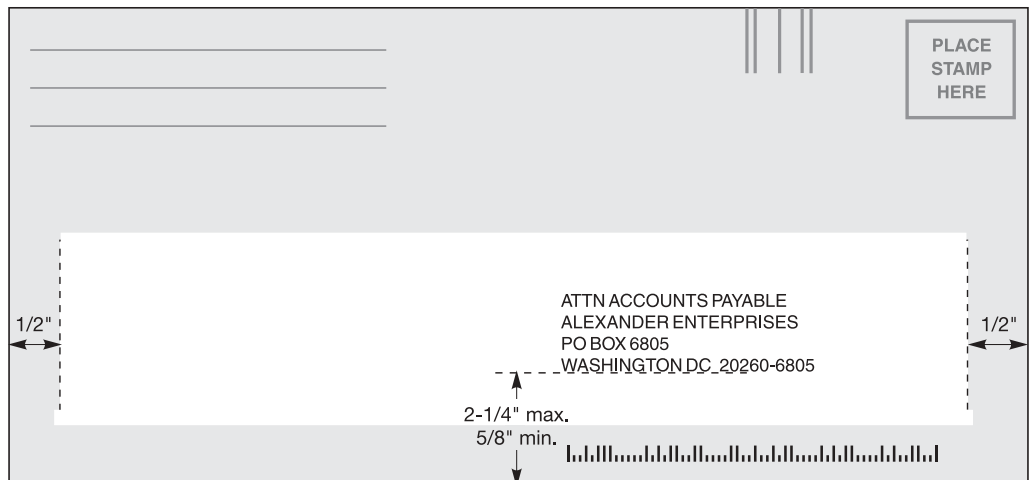
Exhibit 7-6
Return Address Lines
(not drawn to scale)



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)



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.

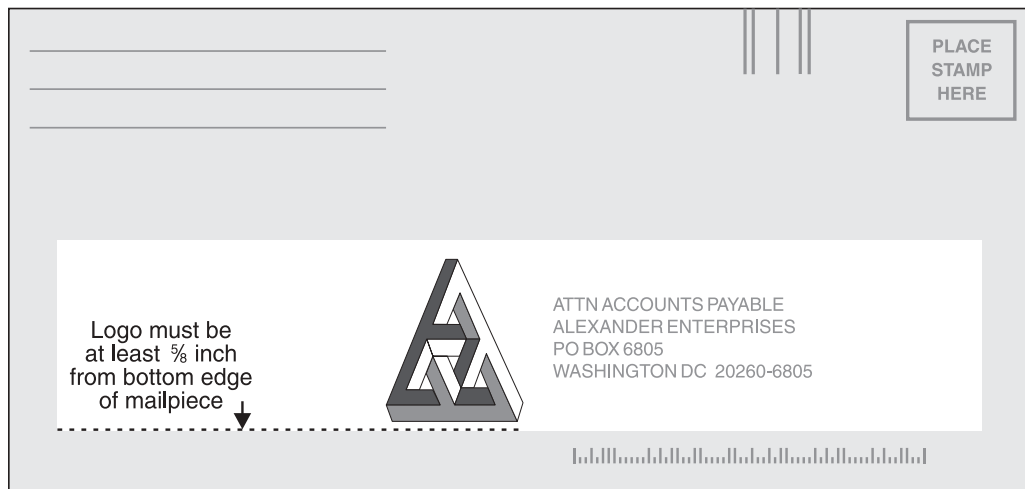
Company Logo

If you include your company logo, be sure that the logo does not extend lower than $\frac{5}{8}$ inch from the bottom edge (see Exhibit 7-8).

Exhibit 7-8

Company Logo

(not drawn to scale)



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

$$\text{PRD} = (R_W - R_p) \times 100$$

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

$$\text{PCR} = \frac{R_W - R_p}{R_W} \times 100$$

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

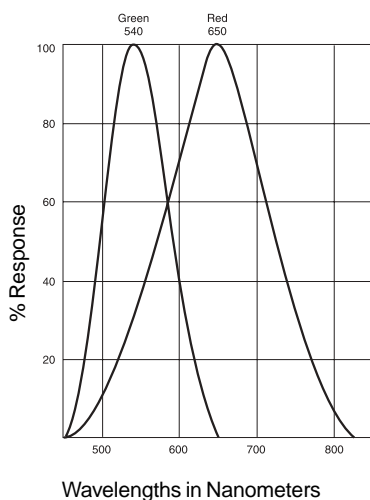
The measurements here apply only to diffuse reflectance. A perfectly reflecting, perfectly diffusing surface has a reflectance of 100 percent. This is the reference or basis for reflectance measurements. Calibrated pressed barium sulfate (BaSO_4) or magnesium oxide (MgO) is a suitable reference standard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



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.

FASTforwardSM—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 (MLOCs) 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 $\frac{1}{72}$ " (0.0138").

POSTNET—(POSTal Numeric Encoding Technique) 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.

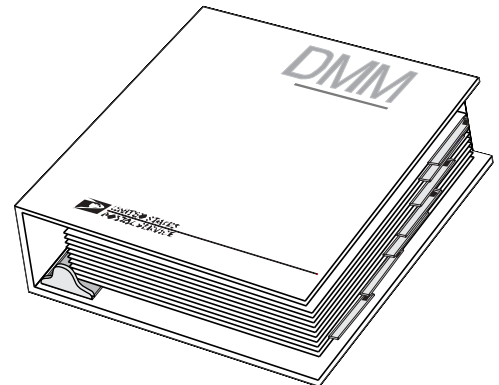
Postal Publications

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

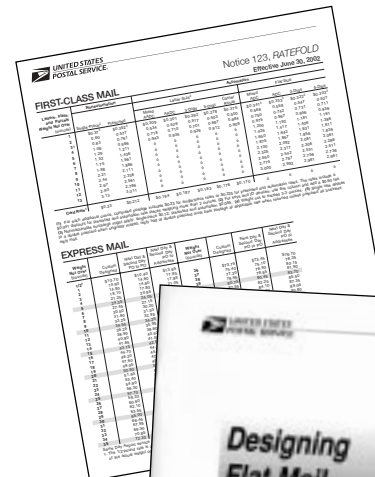
Domestic Mail

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

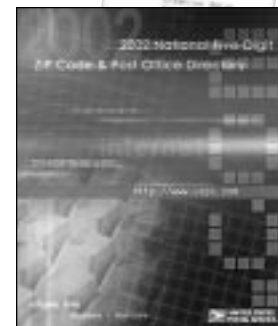
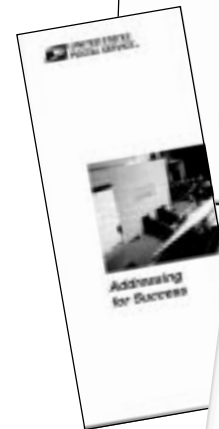
Postal Addressing Standards (Publication 28)—Describes addressing for the best service.

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.

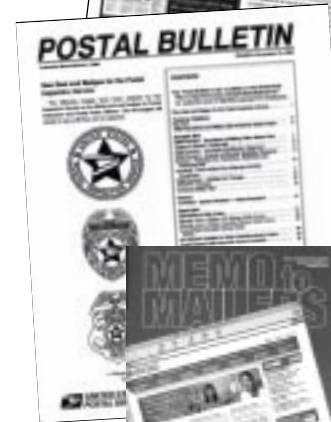


Newsletters

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 1 $\frac{3}{4}$ 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 $\frac{5}{8}$ 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 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 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 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 $\frac{1}{8}$ inch on all sides through the full range of shift.

- Piece measures at least $3\frac{1}{2}$ inches high, 5 inches long, and .007 inch thick.
- Piece is not larger than $6\frac{1}{8}$ inches high, $11\frac{1}{2}$ inches long, and $\frac{1}{4}$ inch thick.

5. Address Block

- Block is at least $\frac{1}{2}$ inch from both edges of envelope and between $\frac{5}{8}$ inch and $2\frac{3}{4}$ inches from bottom edge.
- Letters are all capitals and at least $\frac{3}{16}$ 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 $\frac{3}{4}$ point and 2 points and is a simple, sans serif style.
- Characters are between 8 and 18 points high, inclusive.
- Characters are spaced between $\frac{3}{4}$ 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.



Quick Service Guides

010

Quick Service
Guide

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).

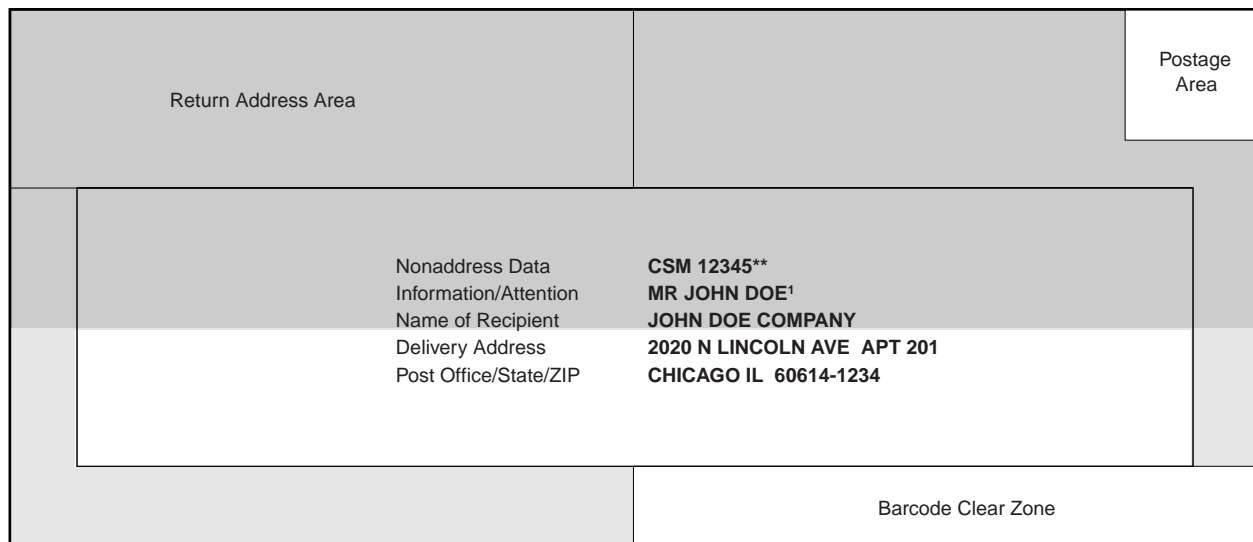
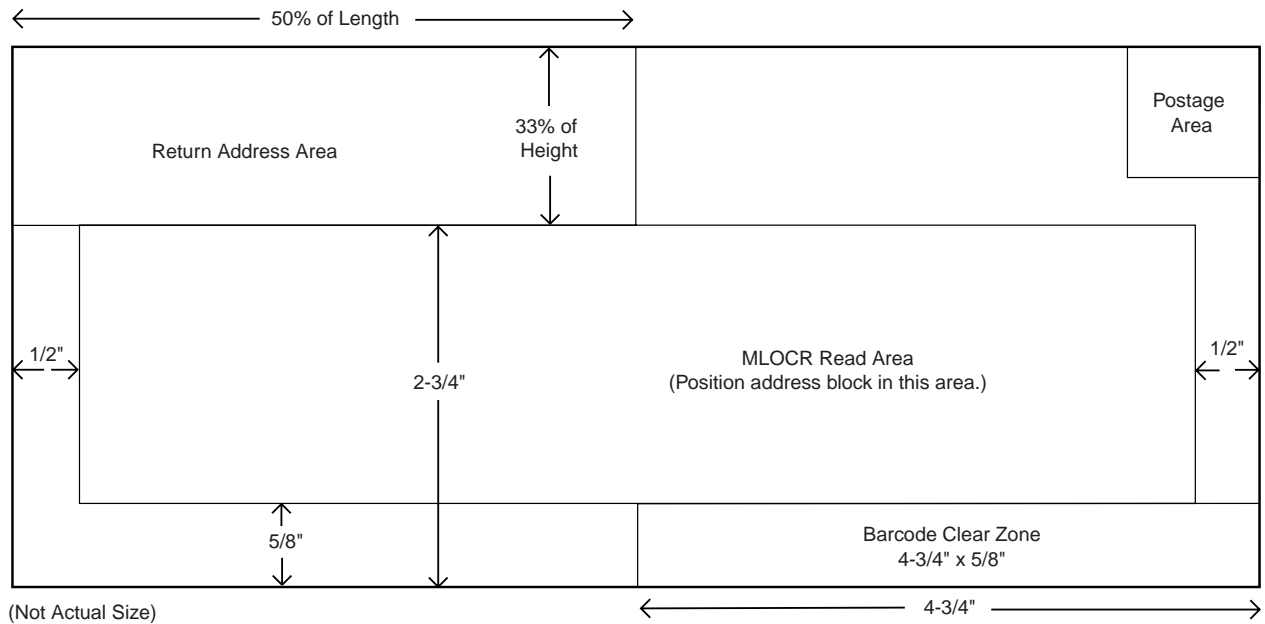
JOHN DOE
JOHNSON MANUFACTURING
500 E MAIN ST STE 222
KANSAS CITY MO 64100-1234

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

Quick Service
Guide

Addressing



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

810

Quick Service
Guide

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

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:

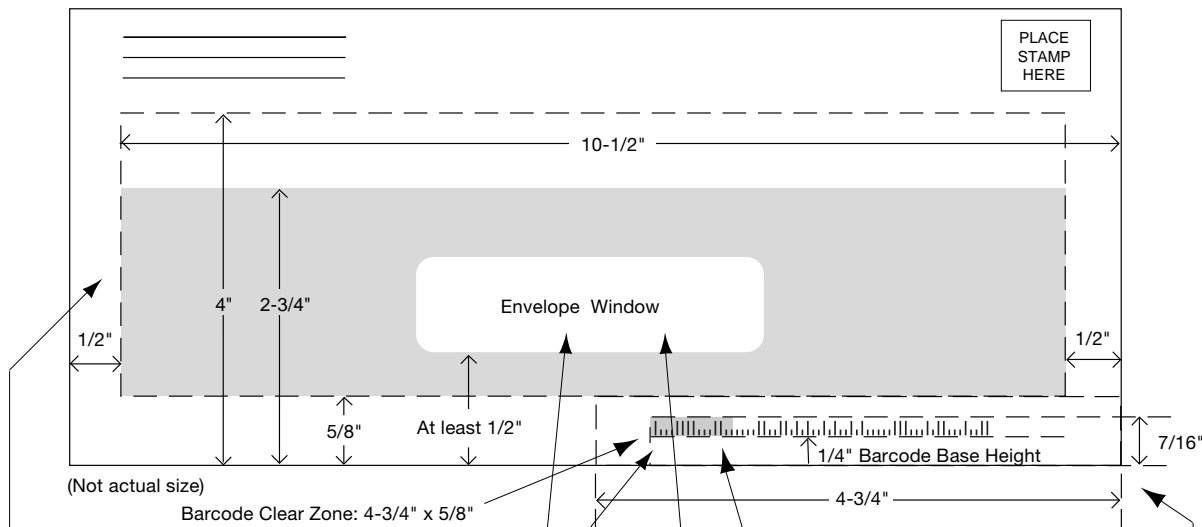
- Format of barcode bars (e.g., dimensions and spacing, C840.4).
- Minimum clearance around barcode for barcodes printed on a mailpiece or label: 1/8 inch on left and right sides; 1/25 inch above and below barcode.
- Placement of address block barcode, lower right barcode, or barcode within a window: 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
GuideDesigning Letters and Cards
for Automated Processing

Physical Standards for Automation-Compatible Mail (C840)



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

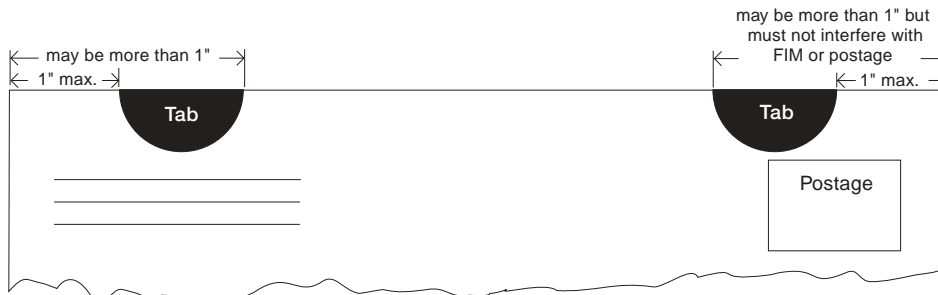
- Overview** Unenveloped letter-size mailpieces prepared for automation rate mailings must be secured (tabbed) to prevent an open edge from jamming high-speed processing equipment. Construction of the mailpiece plays an important role in determining automation compatibility. Standards for tabbing are 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

Quick Service Guide

Tabs and Wafer Seals

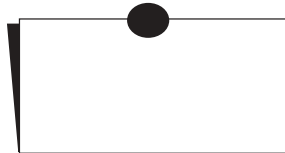
Placement of Tabs and Wafer Seals



Specifications for Automation-Compatible Letter-Size Mailpieces

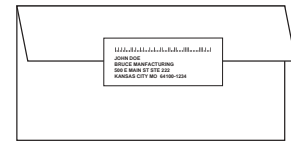
Double Postcard

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



Folded Self-Mailer (Invitation Fold)

Tab Address Label
 Folds Top and Bottom
 Sheets Multiple
 Basis Weight 20 lb.



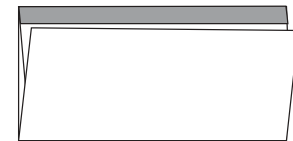
Folded Self-Mailer

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



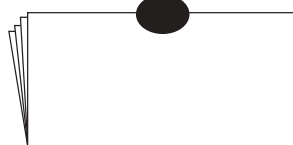
Folded Self-Mailer (Continuous Glue Strip)

Open Edge Top
 Folded Edge Bottom
 Sheets Single
 Basis Weight 20 lb.



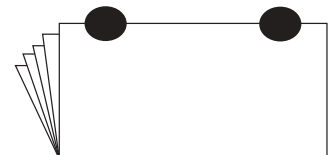
Folded Self-Mailer

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



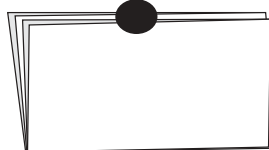
Booklet

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



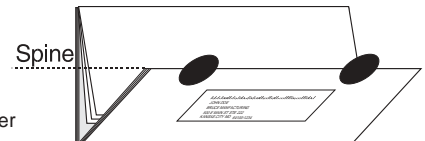
Folded Self-Mailer

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



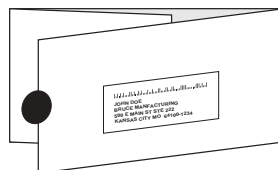
Folded Booklet

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



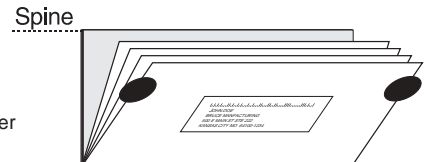
Folded Self-Mailer¹

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



Folded Booklet

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



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)



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.

Business Reply Mail (BRM)

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 permit 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.

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

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.

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

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.

<p>Cost per piece <i>QBRM postage + 6¢</i> Letter (1 oz.): 34¢ + 6¢ = 40¢ Card Rate: 20¢ + 6¢ = 26¢</p>
--

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.

<p>Cost per piece <i>QBRM postage + 0.8¢</i> Letter (1 oz.): 34¢ + 0.8¢ = 34.8¢ Card Rate: 20¢ + 0.8¢ = 20.8¢</p>
--

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

Quick Service
Guide

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.

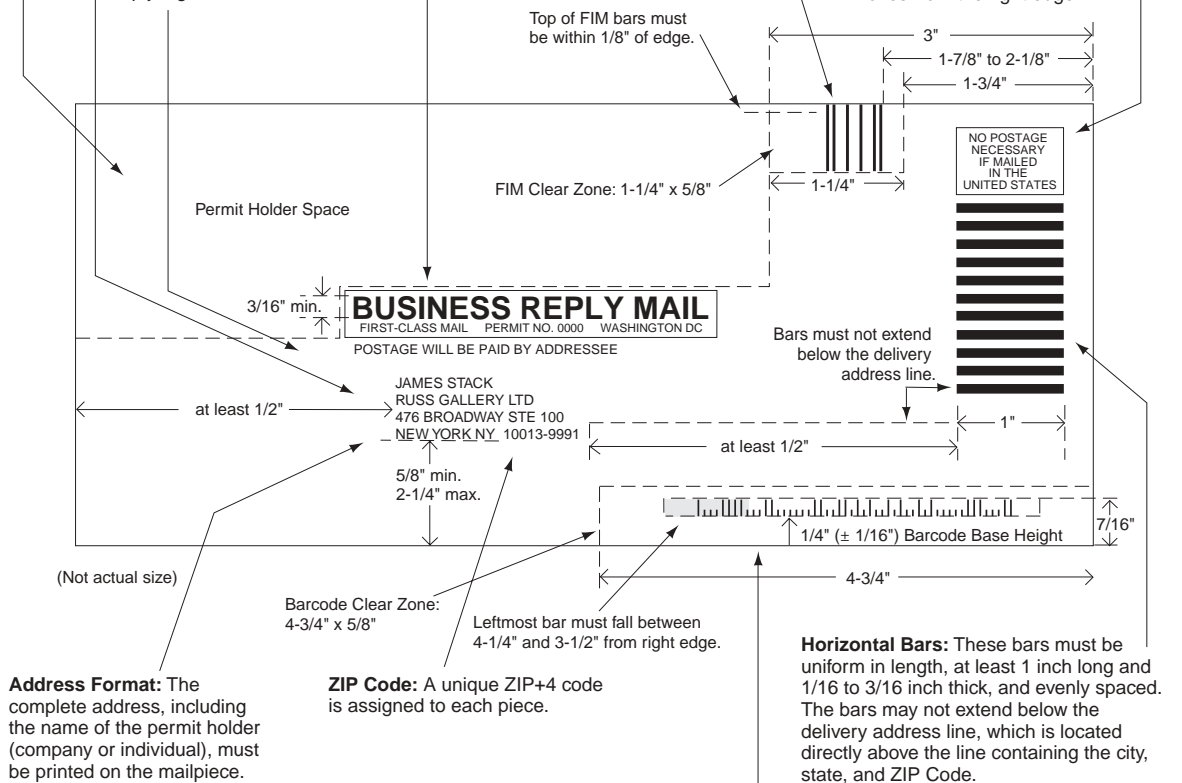
Company Logo: For barcoded pieces, a company logo is permitted in the address block if it is placed no lower than 5/8 inch from the bottom edge of the mailpiece and does not interfere with the barcode clear zone.

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.



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.

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)

923

Quick Service
Guide

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 (C840) Barcodes 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).

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

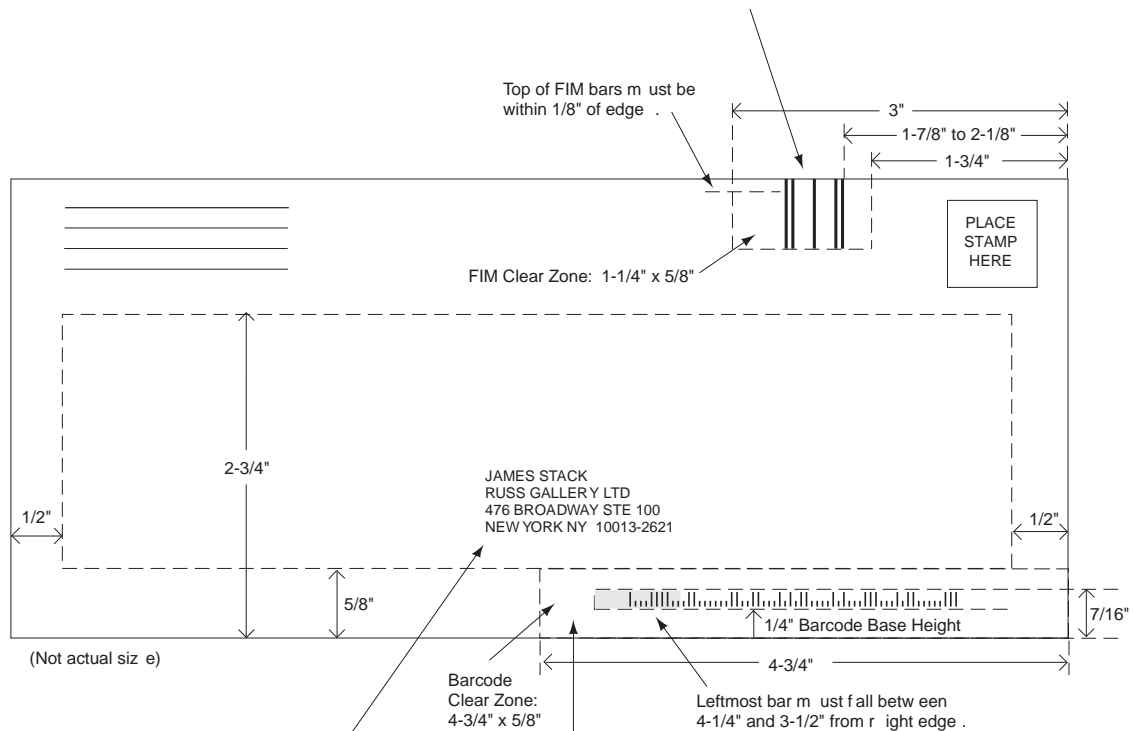
Quick Service
Guide

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.



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 available, 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.

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Quick Service
Guide

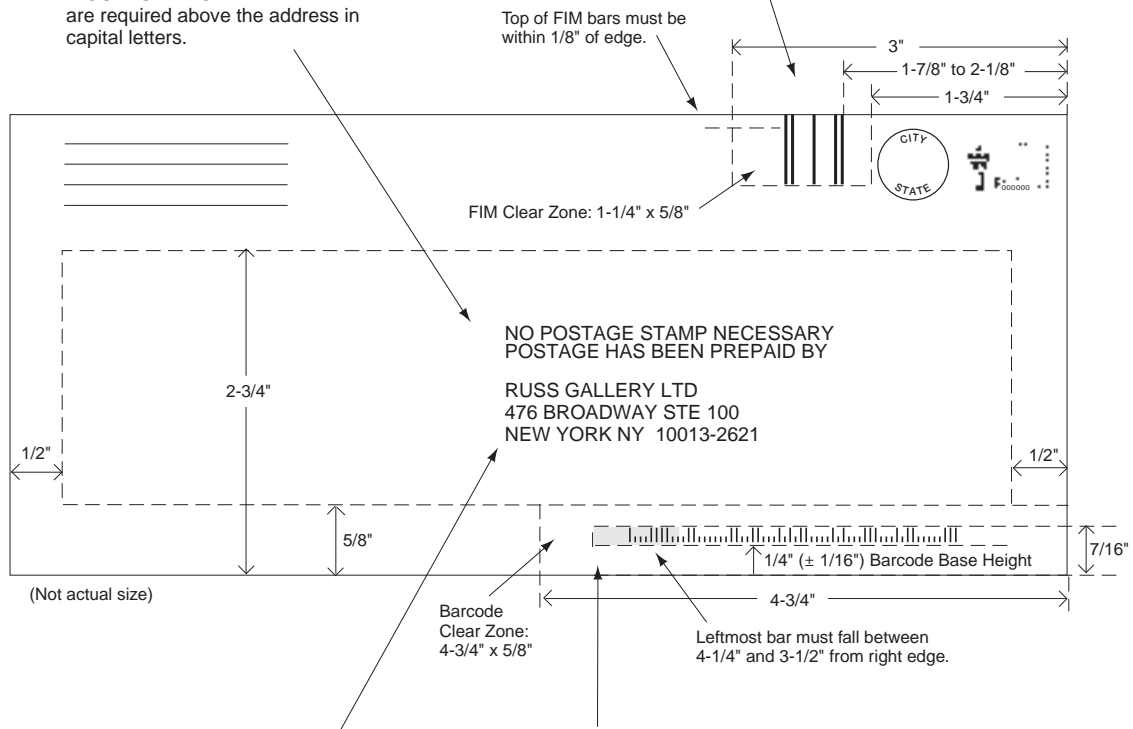
Meter Reply Mail (MRM)

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.



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.

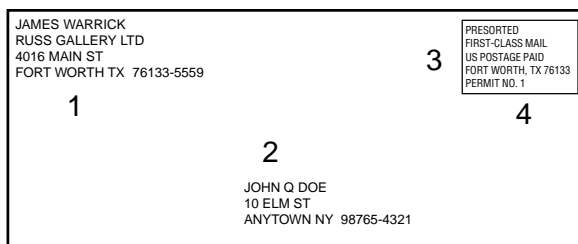
Endorsements must be printed, be no smaller than 8 points, and stand out clearly against the background with a 1/4-inch clear space around the endorsement—above, below, and on both sides. Brilliantly-colored envelopes and reverse printing are not permitted.

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.



First-Class Mail Including Postcards Paid at the Card Rate

Mailer Endorsement	USPS Action on Undeliverable-As-Addressed Pieces
“Address Service Requested”	<p>If undeliverable: Mailpiece returned with reason for nondelivery attached; no charge.</p> <p>If change-of-address on file: <i>Months 1 through 12:</i> Mailpiece forwarded at no charge. Separate notice of new address provided to sender; address correction fee charged. <i>Months 13 through 18:</i> Mailpiece returned with new address or reason for nondelivery attached; no charge. <i>After month 18:</i> Mailpiece returned with reason for nondelivery attached; no charge.</p>
“Return Service Requested”	<p>If undeliverable or change-of-address on file: Mailpiece returned with new address or reason for nondelivery attached; no charge.</p>
“Change Service Requested”	<p>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.</p> <p>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).</p> <p>First-Class Mail with no ACS participant code: Same as USPS action for “Return Service Requested.”</p>
“Forwarding Service Requested”	<p>If undeliverable: Mailpiece returned with reason for nondelivery attached; no charge.</p> <p>If change-of-address on file: <i>Months 1 through 12:</i> Mailpiece forwarded at no charge. <i>Months 13 through 18:</i> Mailpiece returned with new address or reason for nondelivery attached; no charge. <i>After month 18:</i> Mailpiece returned with reason for nondelivery attached; no charge.</p>
“Temp—Return Service Requested”	<p>If undeliverable: Mailpiece returned with reason for nondelivery attached; no charge.</p> <p>If temporary change-of-address on file: mailpiece forwarded to temporary change-of-address; no charge.</p> <p>Otherwise: Mailpiece returned with new address or reason for nondelivery attached; no charge.</p> <p>Temporary change-of-address information is not provided to the sender.</p>
No endorsement	<p>If undeliverable or change-of-address on file: Same as USPS action for “Forwarding Service Requested.”</p>

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
<p>“Address Service Requested”</p>	<p>If undeliverable: Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).</p> <p>If change-of-address on file: <i>Months 1 through 12:</i> Mailpiece forwarded at no charge to addressee. Separate notice of new address provided to sender; address correction fee charged. <i>Months 13 through 18:</i> Mailpiece returned with new address or reason for nondelivery attached; weighted fee charged (address correction fee not charged). <i>After month 18:</i> Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).</p>
<p>“Forwarding Service Requested”</p>	<p>If undeliverable: Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).</p> <p>If change-of-address on file: <i>Months 1 through 12:</i> Mailpiece forwarded at no charge to addressee. <i>Months 13 through 18:</i> Mailpiece returned with new address or reason for nondelivery attached; weighted fee charged (address correction fee not charged). <i>After month 18:</i> Mailpiece returned with reason for nondelivery attached; weighted fee charged (address correction fee not charged).</p>
<p>“Return Service Requested”</p>	<p>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).</p>
<p>“Change Service Requested”</p>	<p>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.</p>
<p>No endorsement</p>	<p>If undeliverable or change-of-address on file: Mailpiece disposed of by USPS.</p>

Standard Mail matter is forwardable only to domestic addresses.

Weighted Fee used only when returning pieces endorsed “Address Service Requested,” or “Forwarding Service Requested.”

EP Outsource

Priority Envelope Inc. (envelope converting)

2920 Northwest Boulevard

Plymouth, MN 55441

(800) 882-0523 • Fax (763) 519-9199

Email: priority@priorityenv.com

www.priorityenv.com

Application MAC: Adobe Illustrator, Macromedia Freehand, Adobe Photoshop, Adobe InDesign, Quark XPress, & Adobe Pagemaker. PC files may be used in the same formats that are used for the MAC, but there may be some font compatibility issues.

Will accept PDF files. If NOT 100% correct, there will be a charge for corrections or they will ask that you provide a corrected file. Files created in Microsoft Publisher, Word, or other word processing applications may not print as expected, and may result in additional charges.

Send graphics separately – DO NOT embed graphics in file. Keep them as a separate link. Must send laser print-outs showing correct lay outs, placement of linked graphics and color separation.

Fonts Send all fonts used in artwork.
With postscript fonts – be sure to include both screen and printer fonts.
Remember to send fonts used in linked graphics.
If you are unable to send fonts – convert our text to outlines.
Make sure type styles have been applied properly. Avoid using pseudo fonts.

Digital Media Will accept: CD-ROM, 3.5" floppies, and 100MB Zip. Other media will result in a 1-day delay. Make all compressed files self-extracting.

Colors All colors must be process or spot (no RGB). All unused colors should be deleted. Spot colors need to carry their proper PMS designation. Colors that have been used to designate special colors need to be named to reflect the color they will print (i.e. a color showing a gold foil imprint should be named "gold foil.")
Set all colors to knockout. Priority will set overprints and traps.

E-mail We do accept files via e-mail. Compress files before e-mailing.
E-mail to "priority@priorityenv.com".
Identify the customer you are sending the art for and the name of the Priority Sales Rep that handles that account.
Fax purchase order and a hard copy of the file.

Miscellaneous No "WHITE OUT"! Delete unwanted items. Clean up files before sending.
Do NOT send film or transparencies for scanning.
Inform Priority of a repeat job – or one with minor changes.

EP Outsource

Western States Envelope & Label (envelope converting)

P.O. Box 2048

Milwaukee, WI 53201-2048

(800) 753-2329

Email: prepress@wsec.com

www.wsec.com

Application Adobe Illustrator, Macromedia Freehand, Adobe Photoshop, Adobe InDesign, Quark XPress, CorelDraw, & Adobe Pagemaker.

Fonts Send all files used in both the document and the graphics.
If you are unable to send fonts – convert your text to outlines.
TrueType and Post Script fonts are acceptable.

Electronic Files Electronic files are not accepted via e-mail.
Need a faxed hard copy of the artwork with a faxed copy of the purchase order.
Need a P.O. number and a contact name sent with the file to prepress@wsec.com.
Send all other correspondence via the 'contact us' page on their webpage.

Media Types: CD's, 3.5" floppies, 100MB Zip, & 250MB Zip.

Miscellaneous Downloadable Die Lines are available online.
Website: www.wsec.com
Die Cuts, Block Sheets, Made up Envelopes, & Web Sheets.

EP Outsource

BCT (Business Cards Tomorrow) (thermographed business cards)

Wholesalers to the Printing Trade

2540 24th Avenue S.

Minneapolis, Minnesota 55406-1219

(800) 877-2281 • Fax (800) 459-6599

Email: bct4029@earthlink.net

www.bct-net.com

Account Number: SPEC02

Application IBM files ONLY! Must convert MAC files to PC format.

Colors 2-color artwork must be color separated.
Different colors touching each other must trap.

E-mail We do accept files via e-mail.
E-mail to "bct4029@earthlink.net".
All e-mail orders must be received by 2:30 p.m. the day prior to production.
Type and art must be converted to EPS, PDF, or TIF file formats for
use on IBM ONLY!
If using a MAC, convert to PC format.

File Quality 300 dpi minimum is required.

Documentation Must have all of this information:
Dealer name, phone and fax #, mainline of the item being ordered, product type
(business card, letterhead, envelope, etc.) stock, color(s), typestyles used, and your
purchase order (if used).

Margins

1. 1/4" margin
2. 3/16" margin
3. 1/8" margin (margins less than 1/8" will not be accepted.)
4. Bleeds must extend 1/16" past edge of card.

Proof
Please proof before sending file.

EP Outsource

Carlson Craft (wedding invites, business cards, etc)

P.O. Box 8700

Mankato, MN 56002-8700

(800) 545-4065

Express Fax: (800) 550-0329

Customer Service: (800) 628-9809

Order Taking: (800) 328-5059

Comm. Fax: (800) 628-9811

Wedding Fax: (800) 562-6661

Wedding Customer Service: (800) 328-1782

Socail: (800) 328-1782

Email: commercialorders@carlsoncraft.com

www.ccbusinesssolutions.com

Must include P.O. Number in subject line of email and our Account Number (52787)

Label Works

(800) 522-3558 • Fax (800) 553-8698

Email: orders@labelworks.com

Application MAC or PC : Adobe Illustrator, Macromedia Freehand, Adobe Photoshop, Quark XPress, & Adobe Pagemaker. PDF files are acceptable.
PC Only : CorelDraw (must be exported).

Fonts Macintosh Adobe Type 1 or Bitstream fonts.
NO TruType fonts allowed.
Never use the stylization pallete to Bold, Italic, etc.
If you are unable to send fonts – convert your text to outlines.

Digital Media Will accept files on: CD-R's, 3.5" floppies, 100MB Zip or online at www.carlsoncraft.com.
Send a copy – not the original.
Will accept PDF files.

Colors Spot Color – Use only CMYK spot colors (do not label them as process colors).
Always follow Carlson Craft's conversion chart.
You are responsible for any trapping (.4 – .7 is acceptable).

Full Color – Every element must be process CMYK.
Refer to Solid to Process Color Guide

Bleeds – 1/8" should be allowed on each applicable side.
Bleeds are not available on full color letterheads and envelopes

NO Screens are available on Creative Colors orders.

Margins

SPOT COLOR

Business cards must be sent 1-up with at least a 1/8" margin.

Envelopes should allow 1/4" from the top and side.

Letterheads must have at least 3/8" at the top and 1/4" along the sides and bottom.

Presentation Folders must have the position noted in the special instructions (or a sample).

FULL COLOR

Business cards should have at least 1/8" margins for portrait style cards.

Postcards need at least 1/4" margins for the portrait style.

Sales sheets, flyers and brochures require at least 1/4" margin for the text or other image that doesn't bleed on all sides. If a bleed is wanted, the text still needs to be 1/4" away from the edge.

Miscellaneous

Please send all graphics sized at 100%.

EP Outsource

Carlson Craft Color Guide

Set up card using Carlson's chart for colors

- * Spot color chart - top left pg. 180
- * One color chart - top left pg. 180
- * Full color - process CMYK - see pg. 180 for rich black (printing black mix)
- * Creative Colors - Top right chart pg. 180 (no screens) or pg. 14C for larger chart.

Output file: [name a folder (job#) 00000-Carlson-Craft_Output for files to be sent to Carlson.] [Create a PDF using separations, correct size, output - send one color at a time. Printer: use High_Res.pdf] [Naming of PDFs: Job# - CustomerName_Ink.pdf. ex. 00000-HardwareHank_Red.pdf. Creative Colors have different Info.] [Be sure to use correct ink color in file name.]

Email Output folder to Carlson Craft.

- * 2 MB Max Size.
- * Include Account #52789 in Subject Line
- * orders@ccbusinesssolutions.com
- commercialorders@carlsoncraft.com
- socialorders@carlsoncraft.com
- folderorders@carlsoncraft.com.
- * Fill out Carlson's order form for Qty., Size, Paper, Inks, etc.

Creative Colors

- * Name color with number only (no # symbol)
- * CMYK - make sure colors are not spot colors in Quark.
- * No screens, halftones, or photos.
- * 2 MB Max. file size.
- * Include Account # 52787 with order in subject line.

HOW TO COLOR YOUR FILES FOR SPOT COLOR PRINTING

ONE COLOR IMPRINT

If ink colors desired are:	Use These Colors
Black.....	Black
Red	Magenta
Blue	Cyan
Brown	Magenta
Green	Cyan
Burgundy	Magenta
Grey	Black
Gold	Yellow
Reflex Blue.....	Cyan
Teal.....	Cyan
PMS Ink	Black or Spot Pantone Color
Any Color not shown	Black
Any Foil or embossing	Yellow (crucial for die ordering)

MULTI-COLOR IMPRINT

If ink colors desired are:	Use These Colors
Black & Blue	Black & Cyan
Reflex Blue & Red	Cyan & Magenta
Black & Red	Black & Magenta
Black & Brown	Black & Magenta
Black & Reflex Blue	Black & Cyan
Blue & Red	Cyan & Magenta
Black & Burgundy	Black & Magenta
Any 2 std. not shown	Black & Cyan/Magenta
Black & 1 PMS Ink.....	Black & Cyan/Magenta/Spot Pantone
2 PMS Inks.....	Black & Cyan/Magenta/Spot Pantone
1 Standard & 1 PMS....	Black & Cyan/Magenta/Spot Pantone
Black & Foil	Black & Yellow
Black & Embossing	Black & Yellow

CREATIVE COLOR CMYK COLOR MIXES CHART

Color	CMYK Equivalent Percentages:
1.....	C-0%M-0%.....Y-100%K-0%
2.....	C-0%M-8.5%Y-79%K-0%
3.....	C-0%M-15%.....Y-94%K-0%
4.....	C-0%M-18.5%Y-100%K-15%
5.....	C-0%M-18.5%Y-34%K-0%
6.....	C-0%M-30.5%Y-83%K-0%
7.....	C-0%M-51%Y-100%K-0%
8.....	C-0%M-60%Y-100%K-6%
9.....	C-0%M-43%Y-23.5%K-0%
10.....	C-0%M-60%.....Y-38%K-0%
11.....	C-0%M-91%.....Y-76%K-0%
12.....	C-0%M-91%.....Y-72%.....K-23.5%
13.....	C-0%M-43%Y-6%K-0%
14.....	C-0%M-65%Y-0%K-0%
15.....	C-0%M-87%Y-0%K-0%
16.....	C-0%M-100%Y-34%K-8.5%
17.....	C-0%M-100%Y-18.5%K-18.5%
18.....	C-0%M-91%.....Y-34%K-38%
19.....	C-47%M-11.5%Y-0%K-0%
20.....	C-69%M-34%Y-0%K-0%
21.....	C-72%M-0%.....Y-0%K-0%
22.....	C-87%M-18.5%Y-0%K-0%
23.....	C-100%M-43%Y-0%K-0%
24.....	C-100%M-72%Y-0%K-6%
25.....	C-100%M-72%Y-0%K-38%
26.....	C-30.5%M-43%Y-0%K-0%
27.....	C-47%M-65%Y-0%K-0%
28.....	C-43%M-91%Y-0%K-0%
29.....	C-30.5%M-27.5%Y-0%K-0%
30.....	C-60%M-47%Y-0%K-0%
31.....	C-79%M-100%.....Y-0%K-0%
32.....	C-51%M-0%Y-18.5%K-0%
33.....	C-72%M-0%Y-38%K-0%
34.....	C-94%M-0%Y-43%K-0%
35.....	C-100%M-0%Y-47%K-15%
36.....	C-100%M-0%Y-47%.....K-30.5%
37.....	C-38%M-0%Y-51%K-0%
38.....	C-76%M-0%Y-91%K-0%
39.....	C-76%M-0%.....Y-100%K-23.5%
40.....	C-27.5%.....M-0%Y-23.5%K-0%
41.....	C-56%M-0%Y-43%K-0%
42.....	C-100%M-0%Y-79%K-8.5%
43.....	C-100%M-0%Y-83%K-47%
44.....	C-8.5%.....M-15%.....Y-34%K-0%
45.....	C-0%M-23.5%Y-43%.....K-18.5%
46.....	C-0%M-34%.....Y-72%.....K-30.5%
47.....	C-0%M-47%.....Y-94%K-47%
48.....	C-0%M-51%.....Y-94%K-60%
50.....	C-0%M-0%.....Y-0%K-65%
51.....	C-11.5%M-0%Y-15%K-79%
53.....	C-0%M-11.5%Y-94%K-6%
54.....	C-0%M-60%Y-100%K-18.5%
55.....	C-0%M-94%.....Y-94%K-6%
56.....	C-100%M-8.5%Y-0%K-0%
57.....	C-60%M-87%Y-0%K-0%
58.....	C-100%M-0%Y-30.5%K-6%
59.....	C-100%M-0%Y-30.5%K-23.5%
60.....	C-79%M-0%Y-87%K-56%
61.....	C-91%M-0%Y-83%K-0%
62.....	C-100%M-0%Y-91%.....K-27.5%
63.....	C-8.5%M-0%.....Y-6%K-47%
Black.....	C-0%M-0%.....Y-0%K-100%
Printing.....	C-80%.....M-80%.....Y-80%K-95%
Black	

EP Outsource

Hawks Tag (stock, printed tags)

P.O. Box 541207

Cincinnati, OH 45254

(800) 752-5765 • Fax (513) 752-3875

Platform PC Based

File Formats Accept PDF's or Illustrator EPS (PC format).

Digital Art We need color separated art - one up all in black.
If you want to send a composite along, that would be fine

EP Outsource

Ennis Business Forms

(Custom, Manifold Books)

114 NE Main Street

Ennis, TX 75119

(800) 443-6647

Fax (972) 875-4840

Email: ennis_prepress@ennis.com

www.ennis.com

Ennis Business Forms

(Continuous Forms, Snap-Outs,
Laser Checks)

P.O. Box 320

DeWitt, IA 52742

(800) 553-0005

Fax (800) 772-9864

Email: dewitt_custom@ennis.com

Ennis Business Forms

(Stock Bus. Forms Imprinted)

P.O. Box 310

Ft. Scott, KS 66701

(800) 835-0672

Fax (800) 225-8130

Email: ft_scott@ennis.com

Account Number: 0403993

Platforms Macintosh and PC

Digital Files Include images that are placed or linked and any special fonts you may have used in your document.

Always use extensions on all files.

.qxd, .ai, .pdf, .pm, .eps

Indicate if it is a 'custom', 'tag/label', or 'imprint' order

Programs For Macintosh:

Adobe Illustrator 10.0

Adobe Photoshop 7.0 (image quality of at least 300 dpi)

Adobe PageMaker 6.5

Adobe Acrobat PDF 4.0 (must be color separated with register marks)

Quark XPress 4.04

Freehand 7.0

Compression Software – Stuffit Deluxe

For IBM PC:

Adobe Illustrator 10.0

Adobe Photoshop 7.0 (image quality of at least 300 dpi)

Adobe PageMaker 6.5

Adobe Acrobat PDF 4.0 (must be color separated with register marks)

Quark XPress 4.04

Corel Draw 9.0

Compression Software – WinZip & Stuffit Deluxe

Miscellaneous

Send a fax or hard paper copy to Customer Service so that they can verify copy. Typefont spacing and other attributes may vary from PC to PC.

When submitting an e-file, it would be helpful if you could indicate if the form is a 'custom', 'tag/label' or 'imprint' order. We would need you to also fax a copy of your purchase order and copy of what your file looks like. Your e-mails come into a PC in the office area but are forwarded and opened in our composition department. The office needs to put your purchase order with your e-file to be sure our composition department

Ennis Business Forms

PDF File Send IF YOU'RE SUBMITTING A PDF FILE FOR ART

In order for our composition department to properly execute your PDF file in a timely manner and for the best quality output, the following guidelines need to be followed:

1. All fonts must be embedded
2. Colors must be spot color and print the correct spot color
3. It must be positioned correctly
4. All graphic files used must be embedded
5. Background screens must be 15% or less
6. The size must be correct
7. Each part (or page) must be saved as a separate file

Because of our different presses and the way each form must be registered, following the above will greatly increase the probability that your PDF file will execute properly. Ideally, the native file (Quark, InDesign or Illustrator) would be better; however, we're more than happy to attempt to convert your PDF with the above stipulations. If we do encounter a problem after the job goes to press, you'll be notified immediately for alternatives.

If you have any questions, please don't hesitate to contact us. Thanks!

_____ CSR Representative

EP Outsource

Discount Labels (roll labels, rubber stamps)

4115 Profit Court

P.O. Box 709

New Albany, IN 47151

(800) 995-9500 • fax (800) 995-9600

Email: art.discountlabels@qualitypark.com

www.discountlabels.com

Platform Macintosh based company

Programs Adobe Illustrator
Adobe Pagemaker
Adobe Photoshop
Macromedia Freehand
Adobe Acrobat
Adobe InDesign
ArtPro
Quark XPress

DO NOT SEND MICROSOFT FILES
(this includes Word for Mac)

Miscellaneous

Be sure to include your company name and telephone number with area code on all correspondence.

EP Outsource

NORTHBEAR Business Cards (4color business cards)

600 Twelve Oaks Center Drive

Suite 640

Wayzata, MN 55391

(866) 774-6686 • Fax (952) 473-3667

Email: orders@northbearbc.com

www.northbearbc.com

Application MAC: QuarkXPress and InDesign are preferred. FreeHand, Illustrator & Photoshop are accepted, but are not appropriate as full-fledged layout programs. Do not use PageMaker 6.X-7, CorelDraw, Microsoft Publisher, Microsoft Word or Microsoft PowerPoint.

Will accept TIF, EPS or PDF. TIF is the preferred choice for 4-color, grayscale and bitmap images. If everything is saved correctly in a PDF, embed all fonts, subset 95. If you are not sure if you saved the file correctly, please attach all fonts used in the folder. File Formats not recommended are GIF, JPEG, WMF (Windows MetaFile) & PICT.

Fonts Type 1 (postscript) fonts are most reliable, although they will accept True Type (TTF) and Open Type. When using bold, italic or outline fonts, be sure to use the actual font version, not the attribute buttons in your layout program.

Colors All files should be sent in CMYK. All files sent in RGB or any other color format will automatically be converted to CMYK and NORTHBEAR will not accept any responsibility for any differences in color!

Miscellaneous Always link and/or embed graphics. Include with every order a directory of all files, including programs used and version numbers, a final laser print of your file(s), at 100% size and with crop marks, all fonts used and all linked graphics.

EP Outsource

Froggy's Pad Signs & Graphics (banners, large format signs, outdoor signs)

Email: frog@nornbergtrailer.com

1306 Broadway West

P.O. Box 258

Little Falls, MN 56345

(320) 632-4842

Application Will accept EPS files.

Colors All files should be treated the same as our large format prints. Any colors will work, but to get the best color expected, files should be correctly preflighted ahead of time.

Miscellaneous Always link and/or embed graphics.
Include with every order all fonts used and all linked graphics. Files can be about 1/3 the finished size (they can print at 300% if need be). Files should be 300dpi if printing at 300%.

EP Outsource

Kenning Outsource (dielines, folders)

7242 Old Hwy 52

St. Cloud, MN 56303

(320) 656-0188 • Fax (320) 656-0181

Email: info@kenningoutsource.com

Platform IBM

Programs Illustrator.ai Version 8 or older. Convert text to outlines, art must be vector.

EP Outsource

Admore (presentation folders)

(Presentation Folders)

24707 Wood Court

Mount Clemens, MI 48045

(800) 523-6673 • Fax (313) 949-8968

Email: admore_prepress@ennis.com

admoreonline.com

Application MAC: QuarkXPress, InDesign, FreeHand, Illustrator & Photoshop, PageMaker, and CorelDraw

Miscellaneous Include all necessary elements, printer fonts, screen fonts and all links. A laser hard copy must be provided along with a digital file checklist. DO NOT APPLY TRAP.

Will not accept Publisher, Word, or Powerpoint.

EP Outsource

NIC (National Imprint Corporation)

www.nation-imprint.com

Account Number: 40888

MIDWEST PLANT

National Imprint Corporation

1675-C Holmes Road, P.O. Box 7310

Elgin, IL 60121-7310

800-929-0900 or 847-622-9905

Fax: 847-622-9925

E-mail Customer Service: csil@national-imprint.com

E-mail Art Department: ilart@national-imprint.com

Midwest Plant Ships To: AR, AZ, CA, CO, IA, ID, IL, IN, KS, KY, MI, MN, MO, MT, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, WI, WY

EASTERN PLANT

National Imprint Corporation

William Ward Industrial Park

Claysburg, PA 16625

800-683-3000 or 814-239-8141

Fax: 814-239-8621

E-mail Customer Service: cspa@national-imprint.com

E-mail Art Department: paart@national-imprint.com

Eastern Plant Ships To: CT, DC, DE, MA, MD, ME, NH, NJ, NY, OH, PA, RI, VA, VT, WV

SOUTHEASTERN PLANT

National Imprint Corporation

3130 Stanton Court, P.O. Box 40818

Charleston, SC 29423-0818

800-929-6505 or 843-552-5512

Fax: 843-552-4882

E-mail Customer Service: cssc@national-imprint.com

E-mail Art Department: scart@national-imprint.com

Southeastern Plant Ships To: AL, FL, GA, LA, MS, NC, SC, TN

EP Outsource

Computer Forms Co. (Clark Printing) (continuous forms)

720 11th Street

Spearfish SD 57783

605-642-5000 • 800-882-3186

fax:605-642-7645

barb@clarkprinting.com or sales@clarkprinting.com

www.clarkprinting.com

Files can be sent via the web: <http://www.clarkprinting.com/transfer.asp>

Applications *Preferred:* Quark Xpress for Mac ver 4.x, Adobe PDF, Adobe Illustrator, Adobe Photoshop, Adobe Pagemaker for Mac ver 6.x, Macromedia Freehand
Others accepted: Adobe Indesign, Adobe Streamline, Adobe Dimensions, Quark Xpress Windows, Adobe Pagemaker Windows.

Convertible *PC Word Processing Formats*

Files Ami Pro 1.2 (Read Only)

Ami Pro 2.0, 3.x

AppleWorks 5.0

ClarisWorks 1.0, 3.0, 4.0, 5.0

DCA-RFT

Multimate Advantage 1.0

Multimate 3.x, 4.0

MS Word DOS 5.5

MS Word Windows 2.0, 6.0, 7.0, 8.0, 2000

MS Works 2.0, 3.0, 4.0, 4.5

PerfectWorks 2.1

Text

WordPerfect 5.0 (Read Only)

WordPerfect Windows 5.x, 6.x, 7.0, 8.0, 9.0

WordPerfect Works 2.0

WordStar (DOS) 5.5, 6.0, 7.0

Word Pro 96, 97, 98, Millennium (9.5)

Mac Word Processing Formats

AppleWorks 6.0

AppleWorks 5.0

ClarisWorks 1.0 - 5.0

MacWrite II

MacWrite Pro 1.0, 1.5

MS Word 4.0, 5.0, 5.1, 6.0

MS Word for Office 98 (8.0)

MS Works 2.0

MS Works 3.0, 4.0

RTF

Text

WordPerfect 2.0, 2.1, 3 - 3.5 enhanced

Spreadsheet *PC Spreadsheet Formats*

Formats AppleWorks 5.0

ClarisWorks 1.0, 3.0, 4.0, 5.0

Excel 4.0, 5.0, 7.0, 8.0, 2000

Lotus 1-2-3 (WKS - WK4. 97, 98, Millennium)

MS Works 2.0, 3.0, 4.0, 4.5

PerfectWorks 2.1

Quattro Pro (DOS) 4.0

Quattro Pro for Windows 1.0 - 8.0

Quattro Pro for Windows 9.0 (Read Only)

WordPerfect Works 2.0

Mac Spreadsheet Formats

Appleworks 6.0 (Read Only)

AppleWorks 5.0

ClarisWorks 1.0, 2.0, 3.0, 4.0, 5.0

Excel 4.0, 5.0

Excel for Office 98 (8.0)

Lotus 1-2-3 (WK3)

MS Works 2.0, 3.0, 4.0

EP Outsource

Database *PC Database Formats*

Formats ClarisWorks 1.0, 3.0, 4.0
dBase (DBF) II, III, IV
FoxBASE/FoxPro
MS Works 2.0, 3.0, 4.0
PerfectWorks 2.1
WordPerfect Works for Windows 2.0

Mac Database Formats

ClarisWorks 1.0, 3.0, 4.0
FoxBASE/FoxPro
MS Works 3.0, 4.0

Graphic EPS, GIF, JPEG, PICT/PICT 2, PC Paintbrush.PCX, TIFF, Windows Bitmap.BMP, Windows
Formats Metafile.WMF, WordPerfect.WPG/WPG2

Compression Gzip, MacBinary, TAR, Z, Zip, Binhex, uuEncode, MIME (Base64), Stuffit

EP Outsource

Creative Laminating

7140 Madison Ave. West

Golden Valley, MN 55427-3602

(763) 746-2663 • fax (763) 746-2664

www.creativelam.com

EP Outsource

Continuous Forms & Checks Incorporated (continuous forms)

6429 Guion Rd

Indianapolis, IN 46268

(317) 328-0022 • (800) 233-2919

EP Outsource

Goes Lithographing Company (stock, certificate borders)

42 West 61st St.

Chicago, IL 60621

(800) 348-6700 • fax (773) 684-2065

sales@goeslitho.com

www.goeslitho.com

EP Outsource

G & S Binding

3RD St & Lake St
Lake Park, MN 56554
(218) 238-5800

EP Outsource

Trendex (Atlas Loose Leaf, Inc.) (binders)

(651) 489-4655 • FAX (651) 489-4423

(800) 328-9200

www.trendexinc.com

E-Mail: info@trendexinc.com

Applications QuarkXPress, Adobe PageMaker, Adobe Illustrator, Macromedia FreeHand & Adobe Photoshop

EP Outsource

Leslie Company (index, tabs, binders)

15290 S Keeler St. PO Box 610

Olathe, KS 66052

(800) 255-6210 • fax (913) 764-4962

art@leslieco.com

www.leslieco.com

Applications Quark Xpress 6.0, PageMaker 7 or InDesign 3.0. Please indicate which version is used

Artwork Adobe Illustrator 10 and Macromedia Freehand 10

NOTES Art can be emailed to art@leslieco.com (Include: Company name - Company phone number - Sales Associate Name - Brief product description)

Files can also be uploaded to their FTP site at <ftp://ftp.leslieco.com> USERNAME: *art*
PASSWORD: *Leslie*

EP Outsource

MAR Graphics (continuous & snap-out forms)

523 South Meyer Avenue P.O. Box 254

Valmeyer, IL 62295

Phone: 800-851-4460 • Fax: 618-935-2989

www.margraphics.com

Electronic Files Prefer to receive Quark files with supplied fonts and hi res images. PDF files and EPS files are acceptable as well, but fonts need to be outlines or embedded.

EP Outsource

Royal Business Forms & Printing (continuous forms)

4000 83rd Avenue North

Brooklyn Park, Minnesota 55443

800-843-5325 or 763-560-6650

Fax: 763-560-8885

Quote: 763-585-8650

Email: prepress@royalbfp.com

Applications QuarkXpress • Adobe Illustrator • Adobe Photoshop • Adobe Pagemaker • PDF's •
Adobe InDesign • Macromedia Freehand • Microsoft Office

EP Outsource

Ideal Printers

645 Olive Street
St. Paul, MN 55101
(651) 855-1100

EP Outsource

Lancer Labels

301 South 74th Street

Omaha, NE 68114

(800) 228-7074 • fax (800) 344-9456

Email: info@lancerlabel.com

Account Number: 080216

Electronic Files Macromedia Freehand (eps, fh9 & 10)
Adobe Illustrator (eps, ai)
Corel Draw (eps, cdr)
Adobe Pagemaker (p65 & 7)
Quark-Xpress (qxd)
Adobe Photoshop (psd, tiff, jpg, bmp, eps)

PDF FILES: When sending a PDF, please follow these guidelines: Embed all fonts, Embed all spot colors, Don't combine Raster & Vector Images. Color Management needs to be turned OFF. Resolution-Linework: 1200ppi Raster File: 300ppi

- Notes**
- *all fonts used should be included
 - *when working with Illustrator,Freehand,or Corel Draw you should convert type to outlines or paths(depending on which software package you are using)
 - *Attach all files that are placed in other files.
 - * All raster based files(i.e. Tiff bitmap eps) should be 300 dpi at 100%
 - * files for 4color process output should be in cmyk mode
 - * Raster based color (tiff, jpg, bmp) artwork should be in color/screen separated files (ex:1 file for black, 1 file for pantone 32, 1 file for black screen)

Do NOT accept:
WORD DOCUMENTS
PUBLISHER FILES
EXCEL FILES

EP Outsource

Twin Cities Envelope (envelope converting)

717 Prior Avenue North

St. Paul, MN 55104

(651) 644-2748

fax (651) 644-5428

EP Outsource

Sauk Centre Web (LF arts and crafts fair directory)

P.O. Box 283

Sauk Centre, MN 56378

(320) 352-2324 • fax (320) 352-1017

FTP: [ftp.saukweb.com](ftp://ftp.saukweb.com)

User ID: Saukweb

Password: 1941

Electronic Files PDF files are acceptable, but PMS colors must be represented by a Process color. For example: Magenta = PMS 285.

EP Outsource

American Color

P.O. Box 359

5101 Valley Industrial Blvd.

Shakopee, MN 55379

(800) 752-9906 • (952) 445-5800

Fax (952) 445-5805

www.americancolor.com

EP Outsource

Holmberg

4155 Berkshire Lane N.

Minneapolis, MN 55446-3814

(800) 328-5101 ext. 2034

graphics@holmberg.com

www.holmberg.com

Applications PageMaker 6.5, Photoshop 5.5, Illustrator 9, Quark XPress 4.1.

Artwork Please include all fonts and artwork with the job. TIF files are preferred. Send the file in B/W and supply hard copy.

EP Outsource

Weldon, Williams & Lick, Inc.

P.O. Box 168

Ft. Smith, AR 72902

(800) 242-4995

fax (501) 783-7050

www.wwlinc.com

EP Outsource

Printegra

6429 Guion Road

Indianapolis, IN 46268

(800) 233-2919 • (317) 328-0022

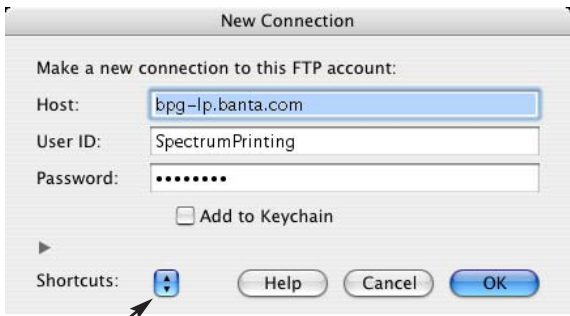
fax (317) 328-0033

Email: in@printegra.com

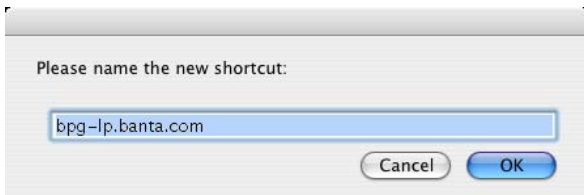
www.printegra.com

Upload to Banta's FTP Site

Launch the **"Fetch"** application. Enter *"bpg-lp.banta.com"* for the Host. Enter *"SpectrumPrinting"* for the User ID and *"spectrum"* for the Password.



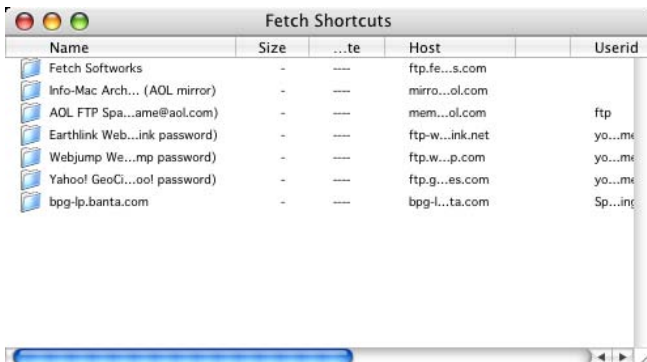
You can create a shortcut to this site by clicking on the arrows next to "Shortcuts:"



Click on the **"Put Files"** button and navigate to the item(s) you wish to upload. (Files should be stuffed or zipped before they are uploaded) Highlight the desired file and click **"Choose"** to upload it.

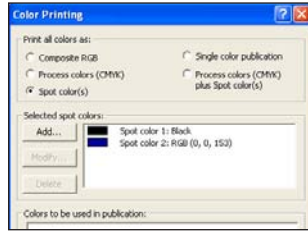
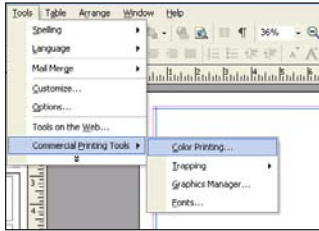


When you are finished, you should see your shortcut in the Fetch Shortcuts window. For future uploads, you can double click on the shortcut — enter the password — and then upload your file.

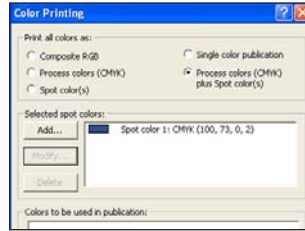


EP Publisher

Setting Colors to Spot or Process: All files that are printing on a Press need to be in color separations (either Spot colors or Process CMYK colors). Immediately after creating a new document, go to Tools — Commercial Printing Tools — Color Printing. If your job is printing in two or three specific colors, then Spot color needs to be chosen. If the job is in full color, then Process colors CMYK needs to be chosen.

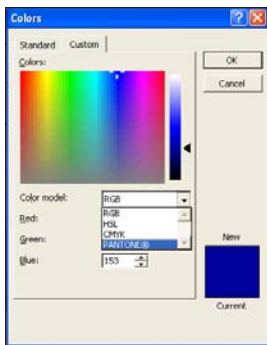


Spot Color



CMYK

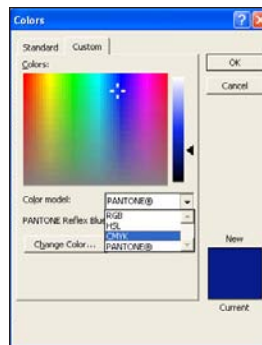
After you have determined whether your job is CMYK or Spot, then you need to choose the colors that you want for the job. Click on Add if you want to create a new color. Click on Modify if you want to change a current color. If you are creating a job in Spot colors, you must choose a PANTONE color for the color mode option. If the job is in CMYK, you need to choose CMYK for the color mode.



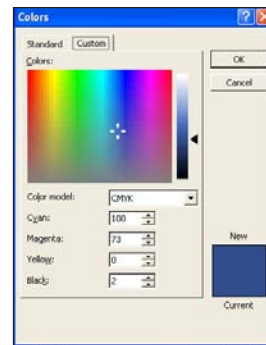
Spot Color



Spot Color

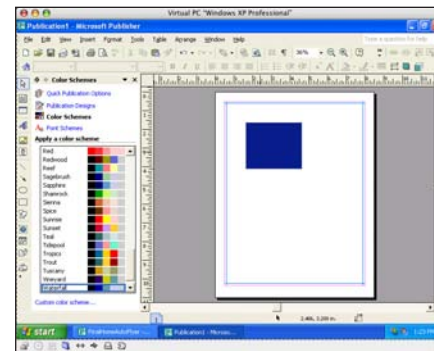
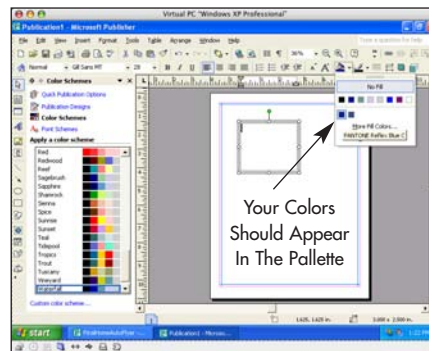
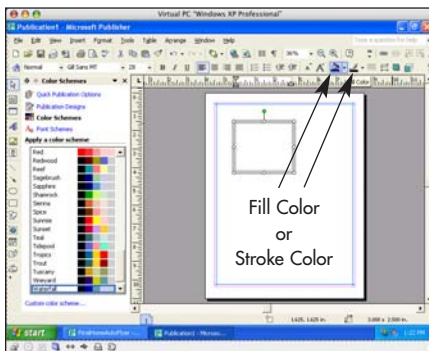


CMYK



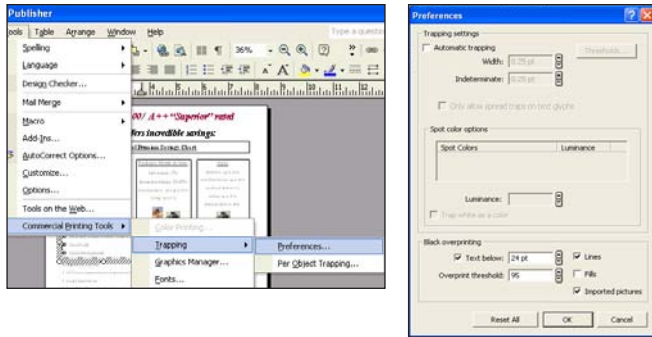
CMYK

When selecting color for a box, line, or text, you need to choose the new colors that were setup to be Spot or CMYK. Tints or screens of a color can be used as well.

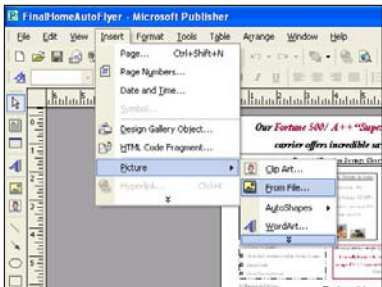


EP Publisher

Trapping: All files that are printing on a Press need to be trapped. All trapping will be done by a trapping program or process, therefore, trapping needs to be turned off in Publisher. After creating a new document, go to Tools — Commercial Printing Tools — Trapping — Preferences. Automatic trapping needs to be unchecked.



Images / Artwork / Pictures: All files that are printing on a Press need to be saved in the correct mode. If the job is printing in black and white, the artwork should be saved as grayscale or bitmap before it is inserted into the Publisher file. If the job is printing in CMYK, the artwork should be saved as CMYK before it is inserted into the Publisher file. Also, the image size should be at least 300dpi for Grayscale and CMYK images. Bitmapped images should be 600dpi.



EP Hay Sales Uploads

1. Open Adobe GoLive
2. Open Mid American site file
3. Choose Connect to Publish Server
4. Open sales results.html
5. Select the entire information from the most current date and Copy
6. Select the entire information from the oldest date and Paste
7. Change the top date to the newest date
8. Select all rows in the first seven columns, except for the top row
9. Delete them
10. Select all rows in the last column
11. Delete them
12. Select all of the empty rows and columns
13. Choose the Import... button in the Inspector > Table
14. Choose the correct .txt file
15. Delete the top row with the Load#, Protein... information in it
16. Delete empty rows, if any, at the bottom
17. Change the row colors to alternate gray-white-gray-white if there are any at the bottom that do not alternate
18. Close window and choose Save
19. Choose Upload modified files
20. Select Save
21. Check website in Internet Explorer or Safari to make sure that all information is correct

EP Online Auction Uploads

1. Open site in Adobe GoLive
2. Connect to publish server while in GoLive
3. Drag .png file into "auction bills" folder
4. Duplicate an existing page from the "auctions" folder
5. Open the duplicated page
6. Delete the existing .png file only
7. Drag new .png from the "auction bills" folder into the open page, before the anchor
8. Change "Title:_____ " to new auction name
9. Close page and Save
10. Change name of html file
11. Open auctions.html
12. Add row for new auction
13. Copy information from .pdf file (keep similar to existing pages)
14. Change name of page/page location to new name
15. Upload modified files
16. Save
17. Check web site in Explorer or Safari to make sure all information/links are correct

EP PDF to PNG for Auction Listings

1. Drag .pdf file into Adobe Photoshop
2. Set resolution to 72 dpi and the color mode to RGB
3. Choose Open
4. Select File > Save for Web
5. Uncheck the Transparency box
6. Choose Save
7. Delet the job number and change all type to lower case (name_auction.png)
8. Select Save

Instructions for Tastefully Simple Business Cards

1. In the email folder, open the current day's folder (anything sent later should be sent to the next day's folder).
2. Select all and print out to HP 5000.
3. Log into the production server through Apple Chooser. Use your user personal login and password.
4. Log into the ApogeeX server, under the chooser, using Administrator for your login (no pass).
5. Open the Hot Folder Root.
6. Open the SP_Acc Folder (under production).
7. Open the TSI_BC_Acc folder.
8. Open the TSI_BC_IN folder.
9. Double check the number of orders against the number of emails you have received.
10. If there are any missing files, open Acc_Backup at this point.
11. Separate the printed order forms according to quantity (250 or 1,000)
12. Open PrintSmith (use your personal username and password).
13. Command O - opens template (one template for 250 and one for 1,000).
14. Do NOT update pricing.
15. Pick account Tastefully Simple - B.C.
16. This will open the Account Info Template.
17. Name group - Hit OK (ex. Lot of 7 - where 7 is equal to the number of 1,000 qty orders).
18. Do this for each of the two groups.
19. Double click 1st line - Template window opens, name that as well.
20. Change the # of sets by clicking on Bindery - Bindery Charges - 1000/Lot or 250/Lot.
21. Change the quantity to the number of 1000 or 250 quantity orders you have received.
22. Hit Change - Hit Clear - Hit Close.
23. Hit File. Then Hit invoice tab, followed by convert to invoice.
24. It will tell you that it requires a purchase order number, just hit OK.
25. Hit OK.
26. Hit Ticket - It will ask you, "Ok to print tickets for all jobs?" - Hit yes.
27. Print Dialog Box will appear - check 'from one to one' and Hit print.
28. Hit Command R (this recalls the last order) and Hit okay.
29. It will tell you that it requires a purchase order again - Hit OK.
30. Hit Print Button - Hit Print - and go get printed out ticket.
31. Repeat process for the other set of orders (1,000 or 250).
32. Create 2 folders on the desktop for order quantities of 250 and for 1,000.
33. Name them TSI_BC_1000 or TSI_BC_250 depending on the order quantity.
34. Open folder - view as list.
35. Go to production folder.
36. Go through files and drag postscript files into your created folder on the desktop.
37. They all should be in numerical order.
38. Throw files from TSI_BC_IN in the trash that are finished.
39. Staple together papers (emails and invoices).
40. Get rid of extra period in the file names in your created folder on the desktop.
41. If missing any of the files from that group continue on to the next page.
Close and repeat for the remaining quantity group.

Instructions for Tastefully Simple Business Cards

42. Go through the papers to find your missing files.
43. Do this by checking the numbers on the pages to the numbers on the files.
44. Command O to open a bunch of files and Command W to close and collapse.
45. Find missing Files that you have now identified.
46. Open Acc_Backup that you loaded earlier. Locate the missing files in this folder.
47. Highlight, option - drag copy to TSI_BC_IN folder.
48. When they show up - then close the Acc_Backup folder.
49. Highlight and Hit Command I - uncheck the box marked "locked."
50. Insert the file number into the postscript file name.
51. Grab ticket sleeve from above computer in the cupboard.
52. Cross out the old information and write in the new information.
53. Contact by email cbushman@tastefullysimple.com for the P.O. number.
54. Include in your email the Invoice number, quantity, and total cost of the order.
55. Repeat for the other quantity group.
56. Place a Post-it note on the sleeve to give to Dan L. with the Invoice number, Quantity, and orders.
-* MISSING A FEW STEPS HERE *-

Mailing Labels

57. Open Dymo Label (from desktop).
58. Go to Edit - List Manager - Open.
59. Hit filing cabinet icon, then Hit create.
60. Go to Power Mac G4 - Dymo Label Software - SCP list files - SCP list files.
61. Hit save.
62. Do not 'import data' when it prompts you.
63. Go to your email and open all of the orders.
64. Copy and paste addresses from the orders to the Label maker (do all 250's first, then do all 1,000's).
65. Erase the middle initial if it is included.
67. Hit the red arrow file icon after pasting each address.
68. Hit the index card icon - this will create a blank address field for the next entry.
69. Repeat over and over again.
70. Select All - Hit the printer icon.
71. It will ask "are you ready to print ### Labels?" - Hit OK.
72. Get labels and put in job ticket.
Repeat for other quantity group.
Close out of Dymo Label Maker.
Take emails and move them to Old_TS Business Cards Folder.

Laminating

1. Maximum paper width for laminator is 25"
2. Make sure there is sufficient material on roll before turning laminator on
3. Allow laminator to heat to 200°
4. Adjust guide to allow for sufficient room on both sides
5. When laminator is ready, line document straight against guide and push the "drive" button
6. When the document is completely through, turn "drive" button to off position
7. Pull laminated document upwards and tear along serrated metal edge
8. When finished laminating, turn laminator off

Instructions for Numbering Using File Maker Pro

1. Open File Maker Pro
2. Open Ordering folder
3. Delete all records (under Records)
4. File – Define Fields
5. Click on Order under Field name
6. Options tab
7. Set starting number, hit OK
8. Done
9. Hit Command N until you hit the required number (total #'s divided by however many up)
10. Records – Show all records
11. Records – sort
12. Click on Order – move – sort
13. Close the Ordering Window
14. Open Data base – 2 sets of numbers
15. Delete all records (under Records)
16. File – Define fields – click numbers – options
17. set starting number – ok
18. Click #'s 2 – options – set starting number – ok – done
19. File – Import records – File – ordering – open
20. Import – ok (repeat step 18 until total records equal #'s)
21. Records – Show All Records
22. Records – sort
23. Sort tab
24. File – export Records
25. Open Job File in production – name job with job #-Numbers.txt
(make sure it is tab separated text)
26. Save
27. Export
28. Close Data base 2 sets odd numbers
29. Quit File Maker Pro
30. Open Quark document
31. Command - option - shift - click to select number box
32. Import numbers (Command E)

EP Server Backup

1. Launch Retrospect
2. Configure
3. Loader - Scan Media
4. Automate
5. Quit without checking sets
6. Menu - insert/eject
7. Eject from library
8. Arrow up - enter (pull out tape - one at a time)
9. Arrow forward when complete to exit
10. Load tapes
11. Arrow to exit

Delete TS Backup

1. Click on Harddrive R1
2. SP_Production
3. SP_ACC
4. ACC_Backup
5. Select a week old and older - drag to trash



Quark XPress versions 3, 4, & 5 • Extension: *.qxd*

Old_QuarkXPress.qxd



Quark XPress version 6 • Extension: *.qxd*

Quark_XPress.qxd



Adobe Illustrator version CS 11 • Extension: *.ai* & *.eps*

Adobe_Illustrator.eps



Adobe Illustrator versions 3-10 • Extensions: *.ai* & *.eps*

Adobe_Illustrator.ai



Adobe PDF all versions • Extension: *.pdf*

Adobe_Acrobat.pdf



Adobe Photoshop all versions • Extensions: *.psd*, *.eps*, & *.tif*

Adobe_Photoshop.psd



Microsoft Publisher all versions • Extension: *.pub*

Microsoft_Publisher



Microsoft Excel all versions • Extensions: *.xls* & *.txt*

Microsoft_Excel.xls



Adobe PageMaker version 6 • Extension: *.p60*

Adobe_PageMaker.p60



Adobe PageMaker version 6.5 • Extension: *.p65*

Adobe_Pagemaker.p65



Adobe PageMaker version 7 • Extension: *.pmd*

Adobe_Pagemaker.pmd



Adobe InDesign all versions • Extension: *.indd*

InDesign.indd



Microsoft Word all versions • Extensions: *.doc* & *.dot*

Microsoft_Word.doc

Fraction to Decimal Conversions

$1/8$.125 in 3.175 mm	$3/32$.094 in 2.381 mm	$5/64$.078 in 1.984 mm	$37/64$.587 in 14.684 mm	0 inch 1/16 5/64 3/32 7/64 1/8 9/64 5/32 11/64 3/16 13/64 7/32 15/64 1/4 17/64 9/32 19/64 5/16 21/64 11/32 23/64 3/8 25/64 13/32 27/64 7/16 29/64 15/32 31/64 1/2 33/64 17/32 35/64 9/16 37/64 19/32 39/64 5/8 41/64 21/32 43/64 11/16 45/64 23/32 47/64 3/4 49/64 25/32 51/64 13/16 53/64 27/32 55/64 7/8 57/64 29/32 59/64 15/16 61/64 31/32 63/64 1 inch
$1/4$.250 in 6.350 mm	$5/32$.156 in 3.969 mm	$7/64$.109 in 2.778 mm	$39/64$.609 in 15.478 mm	
$3/8$.375 in 9.525 mm	$7/32$.219 in 5.556 mm	$9/64$.141 in 3.572 mm	$41/64$.641 in 16.272 mm	
$1/2$.500 12.700 mm	$9/32$.281 in 7.144 mm	$11/64$.172 in 4.366 mm	$43/64$.672 in 17.066 mm	
$5/8$.625 in 15.875 mm	$11/32$.344 in 8.731 mm	$13/64$.203 in 5.159 mm	$45/64$.703 in 17.860 mm	
$3/4$.750 in 19.050 mm	$13/32$.406 in 10.319 mm	$15/64$.234 in 5.953 mm	$47/64$.734 in 18.653 mm	
$7/8$.875 in 22.225 mm	$15/32$.469 in 11.906 mm	$17/64$.266 in 6.747 mm	$49/64$.766 in 19.447 mm	
1 in. 1.00 in 25.400 mm	$17/32$.531 in 13.494 mm	$19/64$.297 in 7.541 mm	$51/64$.797 in 20.241 mm	
$1/16$.063 in 1.586 mm	$19/32$.594 in 15.081 mm	$21/64$.328 in 8.334 mm	$53/64$.828 in 21.034 mm	
$3/16$.188 in 4.763 mm	$21/32$.656 in 16.669 mm	$23/64$.359 in 9.130 mm	$55/64$.859 in 21.828 mm	
$5/16$.313 in 7.938 mm	$23/32$.719 in 18.256 mm	$25/64$.391 in 9.922 mm	$57/64$.891 in 22.622 mm	
$7/16$.438 in 11.113 mm	$25/32$.781 in 19.844 mm	$27/64$.422 in 10.715 mm	$59/64$.922 in 23.416 mm	
$9/16$.563 in 14.288 mm	$27/32$.844 in 21.431 mm	$29/64$.453 in 11.509	$61/64$.953 in 24.209 mm	
$11/16$.688 in 17.463 mm	$29/32$.906 in 23.019 mm	$31/64$.484 in 12.303 mm	$63/64$.984 in 25.003 mm	
$13/16$.813 in 21.638 mm	$31/32$.969 in 24.606 mm	$33/64$.516 in 13.097 mm		
$15/16$.938 in 23.813 mm		$35/64$.547 in 13.890 mm		

Key Commands Legend for Zapf Dingbats

Key	Key + Shift	Key + Option	Key + Shift + Option	Key	Key + Shift	Key + Option	Key + Shift + Option
1				o			
2				p			
3				q			
4				r			
5				s			
6				t			
7				u	see chart below		
8				v			
9				w			
0				x			
a				y			
b				z			
c				`	see chart below		
d				-			
e	see chart below			=			
f				[
g]			
h				\			
i	see chart below			;			
j				'			
k				,			
l				.			
m				/			
n	see chart below			spacebar			

Key	Key + Shift	Key + Option then a	Key + Option then Shift + ...	Key + Shift + Option
e				
i				
n				
u				
`				

Key Commands for Special Characters

<i>Character</i>	<i>Key Command</i>	<i>Character</i>	<i>Key Command</i>	<i>Character</i>	<i>Key Command</i>
ı	Option 1	†	Option t	Î	Option Shift d
™	Option 2	ä	Option u then a	˘	Option Shift e
£	Option 3	ë	Option u then e	Ï	Option Shift f
¢	Option 4	ï	Option u then i	˚	Option Shift g
∞	Option 5	ö	Option u then o	Ó	Option Shift h
§	Option 6	ü	Option u then u	ˆ	Option Shift i
¶	Option 7	√	Option v	Ô	Option Shift j
•	Option 8	Σ	Option w	⌘	Option Shift k
ª	Option 9	≈	Option x	Ò	Option Shift l
º	Option 0	¥	Option y	Â	Option Shift m
å	Option a	Ω	Option z	˜	Option Shift n
∫	Option b	à	Option ` then a	Ø	Option Shift o
ç	Option c	è	Option ` then e	Π	Option Shift p
∂	Option d	ì	Option ` then i	Œ	Option Shift q
á	Option e then a	ò	Option ` then o	‰	Option Shift r
é	Option e then e	ù	Option ` then u	Í	Option Shift s
í	Option e then i	–	Option -	˘	Option Shift t
ó	Option e then o	≠	Option =	˚	Option Shift u
ú	Option e then u	“	Option [◇	Option Shift v
f	Option f	’	Option]	„	Option Shift w
©	Option g	«	Option \	˙	Option Shift x
·	Option h	...	Option ;	Á	Option Shift y
â	Option i then a	æ	Option ’	¸	Option Shift z
ê	Option i then e	≤	Option ,	˘	Option Shift `
î	Option i then i	≥	Option .	—	Option Shift -
ô	Option i then o	÷	Option /	±	Option Shift =
û	Option i then u	/	Option Shift 1	”	Option Shift [
Δ	Option j	◻ or ◻	Option Shift 2	’	Option Shift]
°	Option k	<	Option Shift 3	»	Option Shift \
¬	Option l	>	Option Shift 4	Ú	Option Shift ;
μ	Option m	fi	Option Shift 5	Æ	Option Shift ’
ã	Option n then a	fl	Option Shift 6	˘	Option Shift ,
ñ	Option n then n	‡	Option Shift 7	˘	Option Shift .
õ	Option n then o	º	Option Shift 8	¿	Option Shift /
ø	Option o	·	Option Shift 9		
π	Option p	,	Option Shift 0		
œ	Option q	Å	Option Shift a		
®	Option r	ı	Option Shift b		
ß	Option s	Ç	Option Shift c		

Spectrum Printing Spec Sheet "Macintosh"

Applications	Images	Color	Size
Quark XPress Adobe Photoshop Adobe Illustrator Adobe InDesign Adobe PageMaker Adobe Acrobat (PDF) Microsoft Word (Text ONLY) Macromedia Freehand	.eps (300 dpi) .tif (300 dpi) .pdf (300 dpi) Bitmap (600-1200 dpi) *Avoid LZW Compression *Avoid Transfer Functions *Avoid Image Interpolation	Grayscale C,M,Y,K Pantone (PMS) Duotone	*All Documents should be setup exactly to size. *If the piece bleeds (Image is running to the edge of the piece), 1/8" coverage must be included beyond the file size.

**A printed out sample or "hard copy" should be included with every job, so that we can check content.*

** Other file types are accepted. Please contact your customer service representative if you have a file type that is not listed above. The file specifications above are preferred.*

** FONTS & IMAGES MUST BE INCLUDED WITH EVERY JOB. THE EXCEPTION IS IF A PDF FILE IS PRODUCED, THE FONTS & IMAGES SHOULD BE EMBEDDED. EMBEDDED IMAGES SHOULD NOT BE DOWNSAMPLED TO LESS THAN 300dpi.*

Spectrum Printing Spec Sheet "PC"

Applications	Images	Color	Size
Quark XPress Adobe Photoshop Adobe Illustrator Adobe InDesign Adobe PageMaker Adobe Acrobat (PDF) Microsoft Publisher Microsoft Word (Text ONLY)	.eps (300 dpi) .tif (300 dpi) .pdf (300 dpi) bitmap (600-1200 dpi) *Avoid LZW Compression *Avoid Transfer Functions *Avoid Image Interpolation	Grayscale C,M,Y,K Pantone (PMS) Duotone *Avoid RGB *Avoid Indexed Colors *Avoid Lab Colors	*All Documents should be setup exactly to size. *If the piece bleeds (Image is running to the edge of the piece), 1/8" coverage must be included beyond the file size.

**A printed out sample or "hard copy" should be included with every job, so that we can check content.*

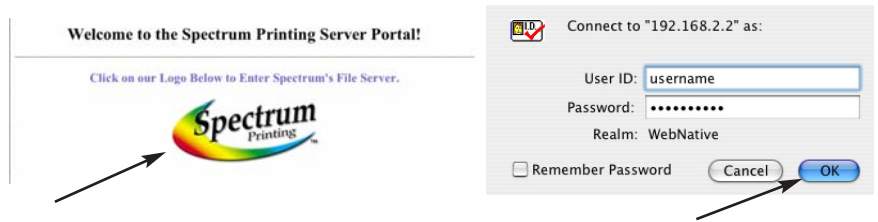
** Other file types are accepted. Please contact your customer service representative if you have a file type that is not listed above. The file specifications above are preferred.*

** FONTS & IMAGES MUST BE INCLUDED WITH EVERY JOB. THE EXCEPTION IS IF A PDF FILE IS PRODUCED, THE FONTS & IMAGES SHOULD BE EMBEDDED. EMBEDDED IMAGES SHOULD NOT BE DOWNSAMPLED TO LESS THAN 300dpi.*

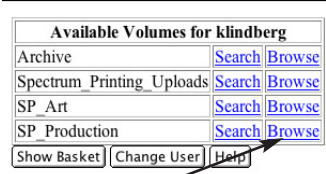
Uploading Files Employees

1. Using Your Web Browser, Type In: sponline.spectrumprt.com

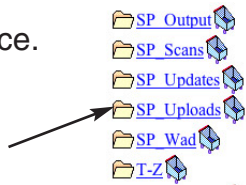
2. Click on the Spectrum Logo. Enter your User ID and Password and click OK.



3. Click Browse Next to SP_Production.



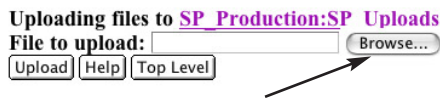
4. Scroll down to SP Uploads and click once.



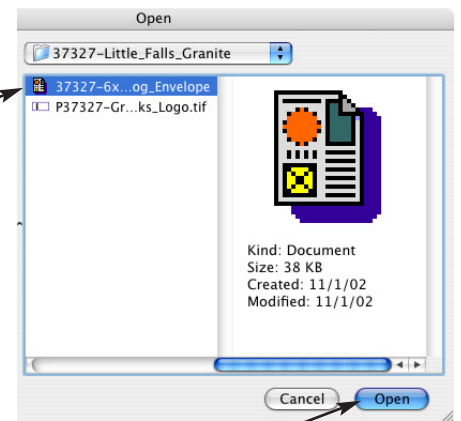
5. Click the Upload Files button towards the top of the screen.



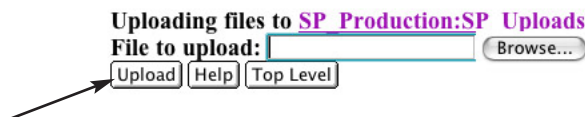
6. Click on Browse.



Choose the file(s) you want to upload. Click on Open.



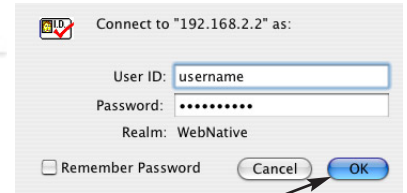
7. Click the Upload button. Quit or click Browse to upload more files.



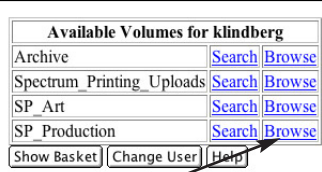
Uploading Files General

1. Using Your Web Browser, Type In: sponline.spectrumprt.com

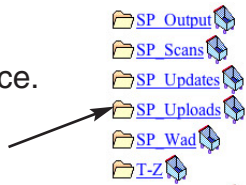
2. Click on the Spectrum Logo. Enter Sp_uploads for your User ID and Spectrum for the Password and click OK.



3. Click Browse Next to SP_Production.



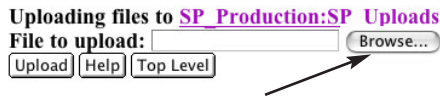
4. Scroll down to SP Uploads and click once.



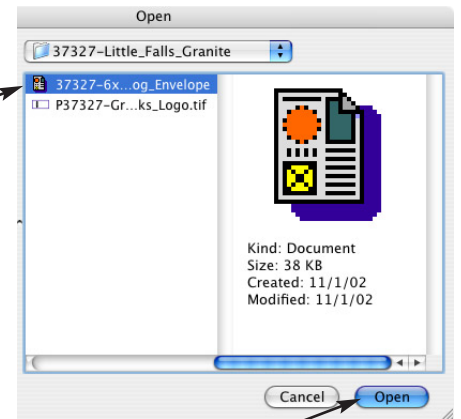
5. Click the Upload Files button towards the top of the screen.



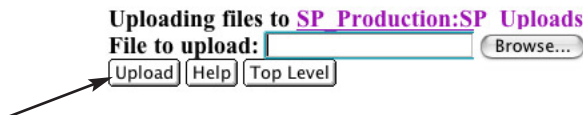
6. Click on Browse.



Choose the file(s) you want to upload. Click on Open.



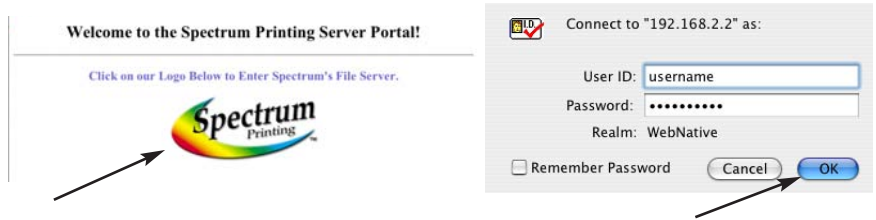
7. Click the Upload button. Quit or click Browse to upload more files.



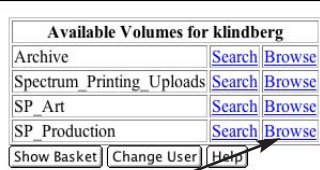
Uploading Files Westside

1. Using Your Web Browser, Type In: <http://192.168.2.2/>

2. Click on the Spectrum Logo. Enter Sp_uploads for your User ID and Spectrum for the Password and click OK.



3. Click Browse Next to SP_Production.



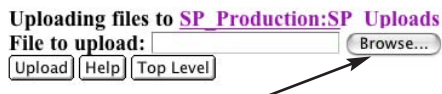
4. Scroll down to SP Uploads and click once.



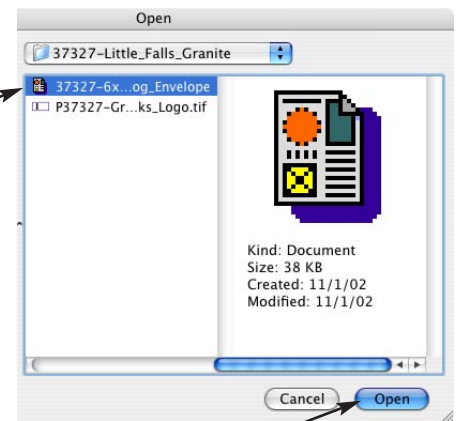
5. Click the Upload Files button towards the top of the screen.



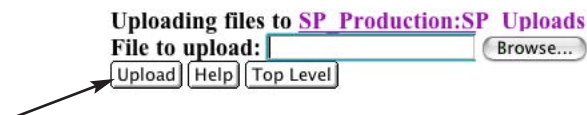
6. Click on Browse.



Choose the file(s) you want to upload. Click on Open.



7. Click the Upload button. Quit or click Browse to upload more files.





Print Order Sheet

Date: _____

P.O. Number _____

Customer/Business Name: _____

Address: _____

Phone: _____ Fax: _____

Email: _____

Electronic Files: Uploaded To Server Supplied On Disk Emailed

File Name: _____

Application(s) Used: _____

Document Size(s): _____ Folded Size(s): _____

Colors Used: _____ Job Is Being Printed On: Press Copier

Bleed Amount: _____ Images Included: YES NO

Fonts Used/Included: _____

Quantity: _____ Number of Pages: _____

Hard Copy Provided: YES NO Proof Needed: YES NO

Type of Proof: Fax PDF Color Copier B/W Laser Digital Blueline Contract

Type of Fold: Roll Double Parallel Side Gate Double Gate Tri/Letter Accordion
8 Page Signature 12 Page Signature 16 Page Signature Misc.

Paper Kind/Color: _____

Delivery Date/Location: _____

Notes/Comments: _____