Designing Letters and Cards for Automated Processing

810

Quick Service Guide

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, C830, C840)

Must meet all physical standards of C810.
Shape: rectangular. Aspect ratio from 1:1.3 to 1:2.5 (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, 0.25 inch thick.

Weight:
Not more than 2.5 ounces:
Upgradable Presorted First-Class.
Upgradable Standard Mail.

Weight:*
Not more than 3 ounces:
Automation First-Class Mail.
Automation Periodicals.
Automation Standard Mail.
Automation Enhanced Carrier Route Standard Mail.

* Exception: For “heavy” letter mail, the maximum weight is 3.4383 ounces for automation First-Class, automation Regular Periodicals, and barcoded Nonprofit Standard Mail; 3.3087 ounces for automation Standard Mail; and 3.3062 ounces for automation Enhanced Carrier Route. Heavy letters must be prepared in envelopes, bear a delivery point barcode under C840 and meet physical standards under C810.

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" on left and right sides; 1/25" above and below barcode.
- Placement of address block barcodes, lower right barcodes, or barcodes within a window: see reverse.
- Reflectance standards for barcode and portion of mailpiece on which barcode is printed (C840.5).
- Barcode clear zone on nonbarcoded pieces within a barcoded rate mailing (less than 15% for Preferred Periodicals and Nonprofit Standard Mail only): see reverse.

Pieces for OCR processing (upgradable and ZIP+4 mail) must meet all standards in C830:
- Return address located above OCR read area: see reverse.
- Delivery address located within OCR read area: see reverse.
- Delivery address machine-printed in a type readable by USPS OCRs (C830.2).
- Non-delivery printing or markings permitted within OCR read area only if positioned above delivery address lines (C830.1).
- Barcode clear zone required: see reverse.
- Address placement in window envelopes: see reverse.
- Reflectance standards apply to OCR read area, barcode clear zone, and ink used to print address information (C830).

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

810

Quick Service Guide

Designing Letters and Cards for Automated Processing

Physical Standards for Automation-Compatible Mail

Pieces Prepared for OCR Processing (C830)

Return Address: Never lower than 2-3/4" from bottom edge (C830.1).

Envelope Window: 1/8"—Minimum clear space separating address block from the edge of the address window; must remain when insert is moved to full limits in each direction within the envelope.

Address Line Skew: See C830.2.

Envelope Window: Bottom edge of address window must not extend more than 1/8" into the barcode clear zone (C830.4), therefore, no closer than 1/2" from the bottom edge of the envelope (C830.4).

OCR Read Area: (gray box) All delivery address elements within OCR read area. The OCR read area is a rectangle formed by these dimensions:

- 1/2" from left and right edges of mailpiece.
- From 5/8" above bottom edge to 2-3/4" above the bottom edge of the mailpiece (C830.1).

Character Height: See C830.2.

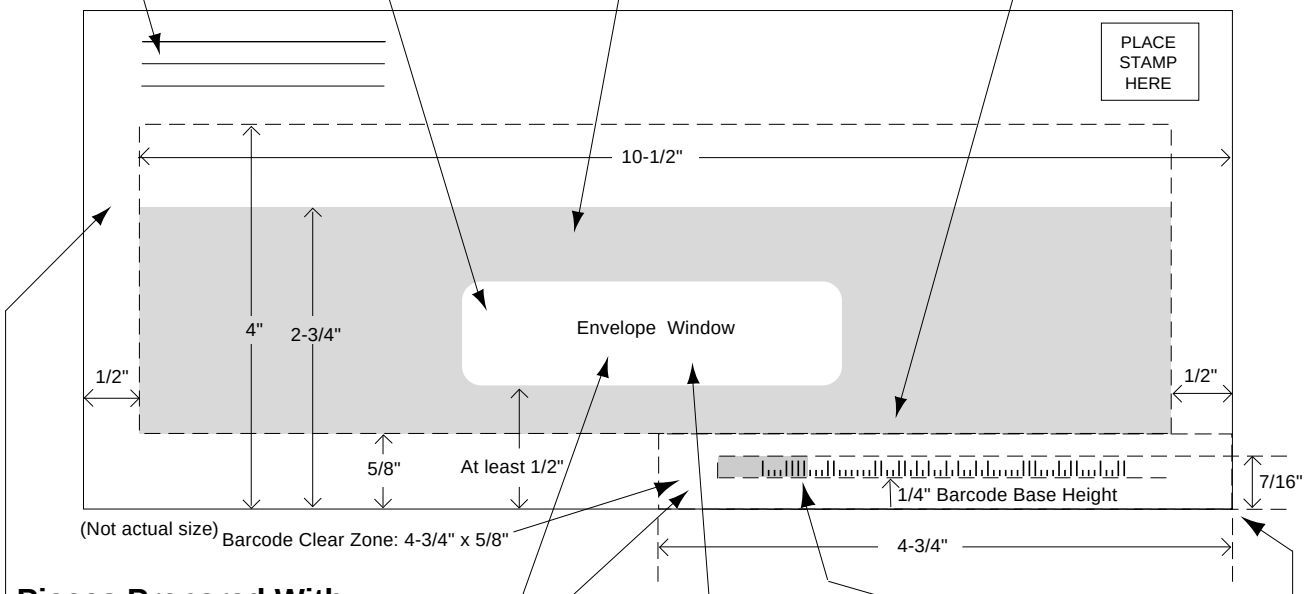
MIN MAX

Line Spacing: See C830.2.

Minimum

Preferred

Barcode Clear Zone: Rectangular area in lower right corner of address side of cards and letter-size mailpieces. See C830.5 for dimensions and C840.5 for reflectance standards.



Pieces Prepared With Delivery Point Barcodes (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—more than 1/2" from right edge of the mailpiece.
- Leftmost bar—less than 10-1/2" from right edge, more than 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.

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).

POSTNET Barcode Location: Leftmost bar between 3-1/2" and 4-1/4" 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: 131, 140, 240, 631, 640, 810

811

Quick Service Guide

Overview

Unenveloped mailpieces prepared for an automation rate mailing must be 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 tabs are based on basis weight of paper stock used for the mailpiece 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. Tabs are not required on flats but may be necessary or advisable to meet other preparation standards.

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 a barcode clear zone, the tabs or wafer seals must contain a paper face meeting the standards for background reflectance and ink acceptance.

Adequate adhesion required.

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

Letter-Size Folded Self-Mailers (C810.7)

Fold must be parallel to the longest dimension (length) 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 reverse).

Letter-Size Booklet-Type Mailpiece (C810.7)

The bound edge or spine must be the longest edge of the mailpiece and must be the bottom of the mailpiece parallel to the address. The mailpiece must be 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 of mailpiece (see reverse).
- The leading and trailing edges or sides must be secured with tabs or wafer seals placed within 1 inch of the top right and top left edges of the mailpiece.

Front and back covers must have a minimum basis weight of 20 pounds.

Cards (C810.7)

Minimum basis weight of 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 one 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.

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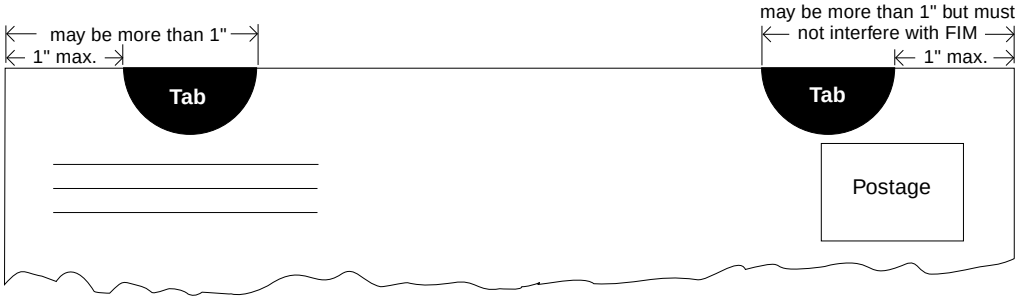
Quick Service Guide

Tabs and Wafer Seals

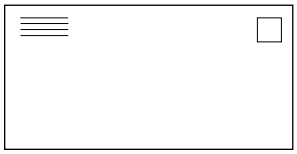
Placement of Tabs and Wafer Seals



Specifications for Automation-Compatible Mailpieces

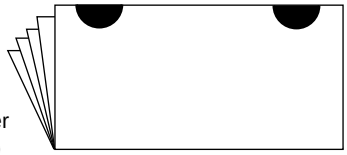
Envelope

Tabs	None (folded/ sealed edges)
Fold/Spine	N/A
Sheets	N/A
Basis Weight	16 lb.



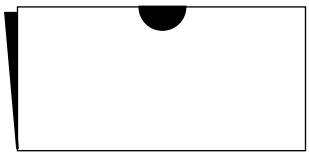
Booklet

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



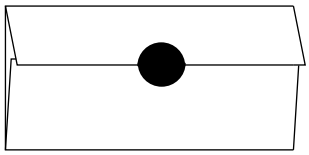
Double Card

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



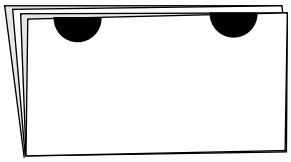
Invitation Fold

Tabs	1 (in center of overlap)
Fold	Top and Bottom
Sheets	Multiple or Single
Basis Weight	20 lb.



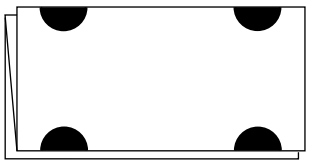
Folded Self-Mailer

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



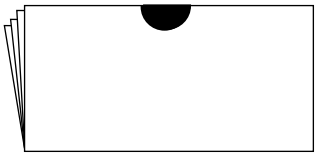
Accordion Fold Tabs

Tabs	4 (2 top and 2 bottom start ≤ 1 inch from edges)
Fold/Spine	Open Edge Top and Bottom
Sheets	Multiple or Single
Basis Weight	20 lb.



Folded Self-Mailer

Tabs	1 (middle)
Fold/Spine	Bottom
Sheets	Multiple
Basis Weight	24 lb.

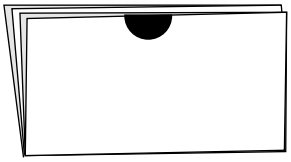


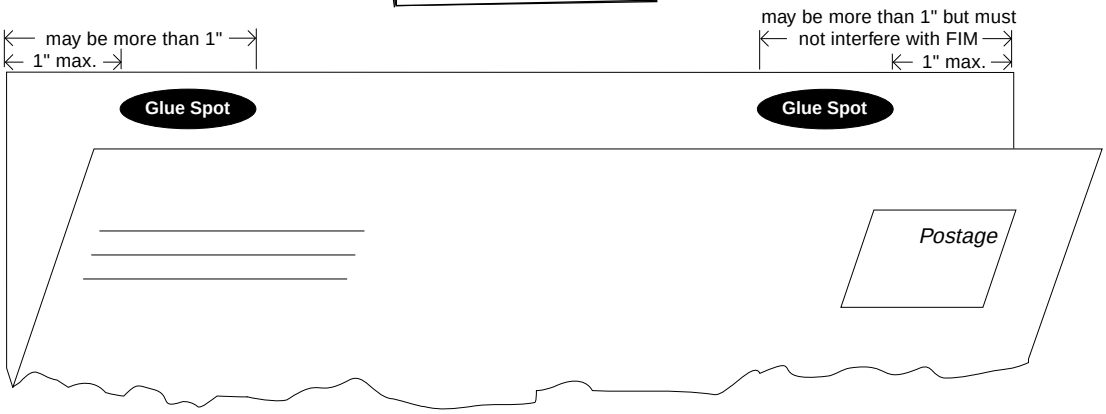
Continuous Gum Strip

Glue Strip	Top Edge
Fold/Spine	Bottom
Sheets	Single
Basis Weight	20 lb.

Folded Self-Mailer

Tabs	1 (middle)
Fold/Spine	Bottom and Right
Sheets	Single
Basis Weight	28 lb.





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Designing Flats for Automated Processing

820

Quick Service Guide

Related QSGs: 141, 241, 641

Overview

Mail designed for automated flats processing equipment includes mailpieces from flat-size and letter-size categories that also meet all the dimensional criteria in C820. For eligibility standards for specific rate discounts, see the appropriate Quick Service Guides: 141 First-Class Automation Flats, 241 Periodicals Regular Automation Flats, 271 Periodicals Nonprofit Automation Flats, or 641 Standard Mail (A) Automation Flats.

Characteristics and Content (C820)

Shape: rectangular.

Dimensions:

- Not less than 6 or more than 12 inches high.
- Not less than 5 inches long *if 6 to 7-1/2 inches high;* or not less than 6 inches long *if more than 7-1/2 inches high.*
- Not more than 15 inches long.
- Not less than 0.009 or more than 0.75 inch thick.

Weight:

- 11 ounces or less if claimed at a First-Class rate.
- 16 ounces or less if claimed at a Periodicals rate.
- Less than 16 ounces if claimed at a Standard Mail (A) rate.

Prohibitions: polywrapped, polybagged, and shrinkwrapped pieces are prohibited unless specifically approved in writing by the Manager, Mail Preparation and Standards. Clasps, strings, buttons, or other protrusions (C820.3).

Rectangular shape of adequate flexibility and rigidity required.

Each piece in an automation flat-size mailing must contain a complete delivery address (A010). Flat-size pieces with a final fold must be designed so that the address is in view when the final folded edge is to the right and any intermediate bound or folded edge is at the bottom.

Mailpiece Length and Height (C820.2)

Length and height of an automation-compatible flat-size mailpiece are determined by the following:

- For a mailpiece prepared as a single sheet or in an envelope, or other enclosures closed on all four sides, the length is the longest dimension. The height is the dimension perpendicular to the length.
- For a mailpiece with a bound or folded edge (e.g., a self-mailer, magazine, newsletter, or folded envelope), or that is in a sleeve or not fully enclosed on all sides, the height (vertical dimension) is the dimension parallel to the bound folded or closed edge. The length is the dimension perpendicular to the height. If the mailpiece is folded more than once or bound and then folded, the height of the mailpiece is based on the final fold.

Barcodes (C840)

Barcodes must be in one of these four positions:

- Above the address line containing the recipient's name.
- Below the city, state, and ZIP Code line.
- Above or below the keyline information.
- Above or below the optional endorsement line.

Barcodes must be at least 1/8 inch from any edge of the address side. No more than one POSTNET barcode per piece. Additional standard apply for address block barcodes.

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.

820

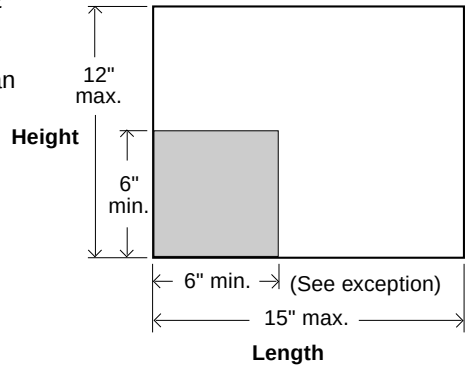
Quick Service Guide

Designing Flats for Automated Processing

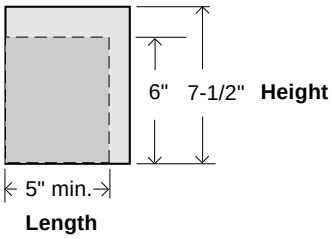
Dimensions:
Mail compatible with automated flats processing equipment includes letter mail between 6 and 7-1/2 inches high to 11-1/2 inches wide, and all flat-size mail subject to these conditions:

Shape: Rectangular.
Dimensions:
- Not less than 6 or more than 12 inches high.
- Not less than 5 inches long *if 6 to 7-1/2 inches high;* or not less than 6 inches long *if more than 7-1/2 inches high.*
- Not more than 15 inches long.
- Not less than 0.009 or more than 0.75 inch thick.

Determining Weight, Length and Height:
See reverse.

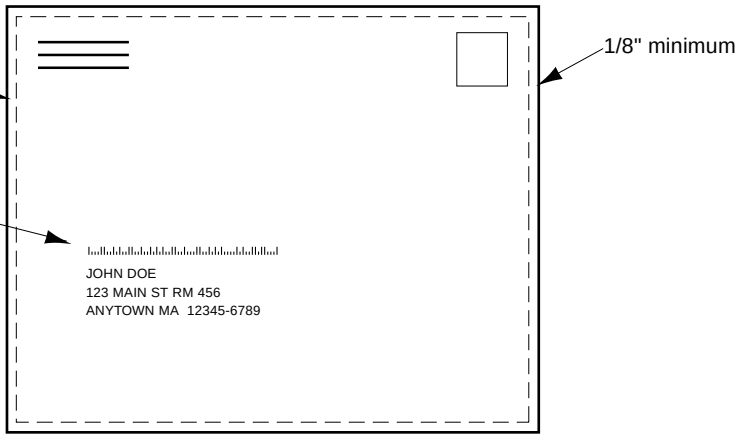


Exception:
May be minimum of 5" in length if height is between 6" and 7-1/2."



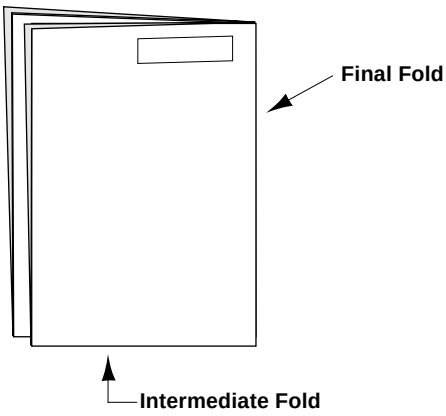
Barcodes:
Barcodes must be at least 1/8 inch from any edge of the address side (C840.3).

Barcodes in address block must be in one of four positions:
- Above address line containing recipient's name.
- Below city, state, and ZIP Code line.
- Above or below keyline information.
- Above or below optional endorsement line.



Final Fold:
Flat-size pieces with a final fold must be designed so that the address is in view when final folded edge is to right and any intermediate bound or folded edge is at bottom (C820.2).

Measurement for bound and unbound flats not prepared in envelopes (e.g., magazines and newspapers) relate to specific orientation of the spine (bound edges) or final folded edge of the piece.



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Designing Parcels for Automated Processing

830

Quick Service Guide

Related QSGs: 050, 700

Overview

This guide will help you design parcels for automated processing for faster, more efficient delivery.

Characteristics and Content (C050)

Dimensions:
- Rectangular, square, or cube.
- Not less than 3 inches or more than 17 inches high.
- Not less than 6 inches or more than 34 inches long.
- Not less than 0.25 inch thick or more than 17 inches thick.

Weight:
- Not less than 8 ounces or more than 35 pounds.
- Books and printed matter not more than 25 pounds.

Proper Container (C010.3)

Use sturdy materials to withstand handling.
Size must be adequate to contain items and provide space for cushioning material.
- Paperboard boxes for easy and average loads to 10 pounds.
- Metal-stayed paperboard boxes for easy and average loads up to 20 pounds.
- Solid corrugated fiberboard boxes as shown below.

Grade	Maximum lb. weight of box and contents		Maximum length & girth in inches
	Easy and avg. loads	Difficult loads	
125	20	—	67
175	40	20	100
200	65	45	108
275	70	65	108
350	–	70	108

- Wood, metal, or plastic boxes are generally acceptable for all types of loads.
- Soft goods in paper or plastic bags and enveloped printed matter up to 5 pounds are acceptable.

Avoid waxed or oiled materials, exterior styrofoam boxes, and unsecurely packaged articles.

Cushioning (C010.4)

Cushioning absorbs shock and vibration of handling. Combinations of cushioning materials are most effective. Cushion items separately. Examples of cushioning materials: foamed plastics, rubberized hair, corrugated fiberboard, loose-fill material, shredded paper.

Closure and Sealing (C010.5)

- Use pressure-sensitive, reinforced tape.
- Reinforced paper tape at least 2 inches wide, at least 60-pound basis weight.
- Adhesive (glue, paste, thermal plastic, etc.). Must be serviceable from -20ºF to 160ºF.
  Staples and steel stitching acceptable if spaced less than 5 inches apart for easy loads; less than 2.5 inches for difficult loads.

Avoid twine, cord, rope, cellophane tape, and masking tape.

Mail Preparation

Sacking and labeling (M630.6).
Palletization of combined Standard Mail (A) and (B) machinable parcels (M073).
Palletization of Standard Mail (A) or Standard Mail (B) machinable parcels (M045.8).

Special Services (S900)

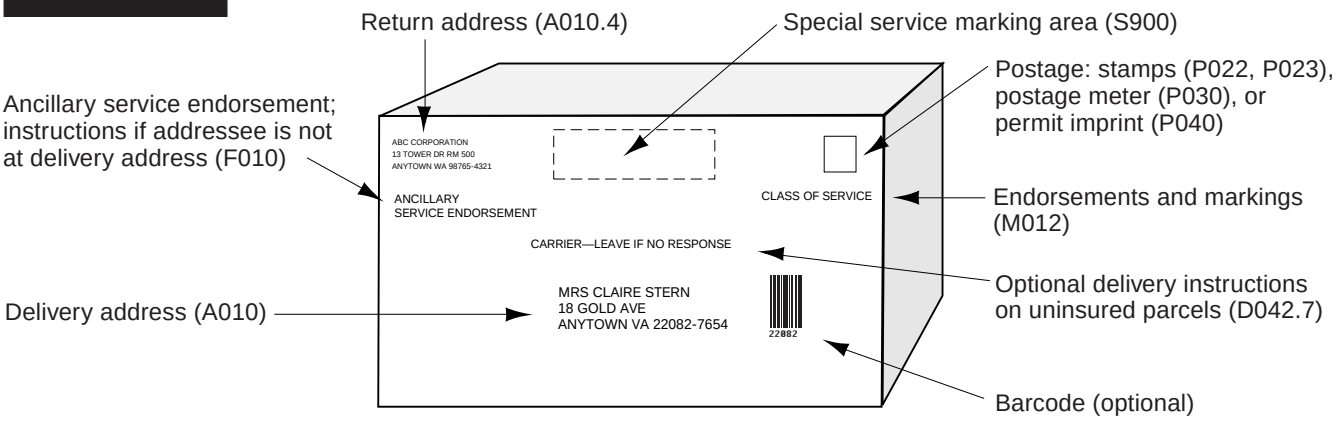
See Quick Service Guide 900.

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.

830

Quick Service Guide

Designing Parcels for Automated Processing



Weight:
- Not less than 8 ounces or more than 35 pounds.
- Books and printed matter—not more than 25 pounds.

- Only postage, address, and delivery instructions to appear on face of package.
- Class of service may be indicated on face and sides.
- Avoid glassine covering address and barcode.

Barcode, Optional

Code 39 | Code 128 | Interleaved 2 of 5

The barcode consists of the ZIP Code and a check character. The barcode may appear anywhere on the face of the parcel.

Barcode Dimensions:
Height should be greater than 3/4 inch. Contact your postal business center for specifications.

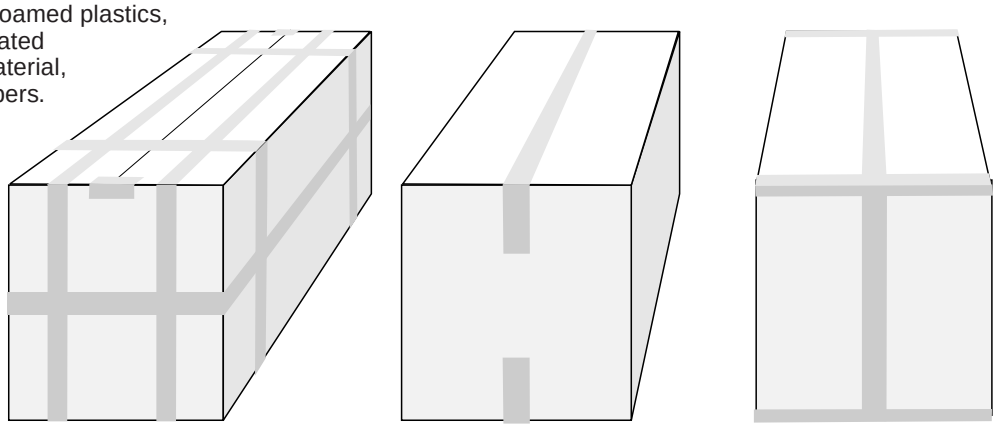
Container (see front for details):
- Sturdy paperboard or fiberboard boxes.
- Wood, metal, or plastic boxes.
- Plastic or paper bags may be used up to 5 lb.
- Enveloped printed matter up to 5 lb.

Avoid waxed or oiled materials, styrofoam exterior box.

Cushioning:
- Cushion items separately.
- Combine materials for most effectiveness. Cushioning materials: foamed plastics, rubberized hair, corrugated fiberboard, loose-fill material, and shredded newspapers.

Sealing (see front for details):
- Pressure-sensitive reinforced tape.
- Reinforced paper tape.
- Staples or steel stitching.
- Adhesive.

Avoid twine, cord, rope, cellophane tape, and masking tape.



Pressure-sensitive filament tape | Reinforced kraft paper tape | Kraft paper tape

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