

Service Level Requirement (SLRs).

The Contractor must consistently meet or exceed the following the performance specifications for the Service Level Requirements (SLRS) to be established between the Contractor and ODPS. The supplement contains the expectations related to service level commitments and the implications of meeting versus failing to meet the service level requirements and objectives, as applicable. The following are minimum service levels required for the duration of the Contract period.

Both the State and the Contractor recognize and agree that new categories of Service Levels and performance standards may be added or adjusted during the term of the Contract as business objectives, organizational objectives and technological changes permit or require.

The Contractor will not be liable for any failed Service Level caused by circumstances beyond its control, and that could not be avoided or mitigated through the exercise of prudence and ordinary care, provided that the Contractor immediately notifies the State in writing and takes all steps necessary to minimize the effect of such circumstances and resumes its performance of the Services in accordance with the SLRs as soon as possible.

Service Level Commitments.

The Contractor will meet the Service Level commitment for each Service Level set forth in the charts below:

Service Level	Requirements		
	Support Hours	Response	Resolution/Remedy
System and Equipment Availability. The Vehicle Registration printing system must not have downtime longer than 24 consecutive hours Monday through Friday, due to failure of the Contractor’s equipment.			If a lengthy failure occurs, the Contractor must provide staff to complete any backlogged work.
System Backup. The Contractor must provide a complete backup system to ensure that if a Contractor-provided printer or server fails, production will not be affected.			If a failure of the Contractor’s equipment or software results in more than two downtime periods exceeding 6 consecutive hours each within 5 consecutive business days, the equipment must be replaced with new equipment at no cost to the State.
Vehicle Registration Forms and Validation Stickers. If any vehicle registration form or validation sticker fails to meet the requirements of this RFP, the Contractor must compensate the State for its actual losses.			The cost per form and sticker plus; cost of labor required to reprint Vehicle Registration forms; and administrative costs (i.e., postage for replacement, labor for distribution, handling, etc.).

Service Level	Requirements		
	Support Hours	Response	Resolution/Remedy
Technical Support and Service Availability. Contractor must provide ongoing support and service to users of the Vehicle Registration printing system.	Monday through Friday, 8:00 a.m. to 5:00 p.m. (Columbus, Ohio local time - Eastern Time Zone)	Contractor response within 30 minutes	
Issue Resolution. Mean Time to Repair/Resolve.	Monday through Friday, 8:00 a.m. to 5:00 p.m. (Columbus, Ohio local time - Eastern Time Zone)	Contractor must be on-site within 4 hours	The issue must be resolved within 24 hours

Issue Resolution Definitions

- a. Mean Time to Repair/Resolve: Mean time to repair will be measured from the time an Issue is reported to the Contractor’s Help Desk to the point in time when the Issue is resolved or a workaround is in place and the Contractor submits the repair to the State for confirmation of resolution.

Introduction

The intent of this supplement is to provide software development standards and guidelines for new software development projects at the Ohio Department of Public Safety (ODPS). In this regard, proposed solutions will be evaluated against these standards and guidelines and industry best practices as they relate to data security, data integrity, databases, development tools, programming languages, server operating systems, transaction coordination and n-tier architecture for example. All new ODPS projects will target an ODPS-standardized n-tier architecture hosting environment.

Web Hosting Environment Architecture

The ODPS has established an enterprise web hosting environment that hosts multiple applications and is the target environment for all new applications. This environment implements an “n-tier” architecture dividing the functionality of a system into multiple tiers where each tier is comprised of a different server, or set of load balanced servers, logically and physically separated by VLAN and firewall. The core tiers include a web presentation tier, service interface application tier and database tier. The design goal of this environment is to maintain a secure and structured architecture that is predictable in its operation and easily supported. For a visual representation of this environment see the diagram located at the back of this section.

There are two sides to the environment – external (Internet facing) and internal (intranet). The external web services and pass-through servers exist in a separate Microsoft Active Directory forest from the internal. This separation was designed for additional security between external Internet facing applications and the internal application services and associated databases. In this configuration access to the database is controlled or funneled through the application or reporting servers only. Therefore access to the database is prohibited from any other server including the web servers for example.

For the purposes of predictive success in hosting production applications, the ODPS has built three additional environments identical to the production environment: development, integration testing/system testing (IT/ST) and quality assurance (QA). It is through these environments that application code is developed; promoted to IT/ST for functional and integration testing; promoted to QA for performance, load and user acceptance testing; and finally promoted to production.

The ODPS strives to use this well secured and structured environment without modification. However, per approved project requirements, changes to the hosting environment’s architecture may be considered. In a case where the project requires a significantly different architecture, a completely separate environment may be designed and built on separate networks and servers.

ODPS Technology Supplement

OHIO DEPARTMENT OF PUBLIC SAFETY
Information Technology

Technology Stack

Below is a list of primary tools and technologies used by the ODPS for new projects as it relates to development. This list and versions should not be considered all inclusive.

Tools / Technologies	Tier	General Information
Microsoft Visual Studio 2012	Presentation	The primary development platform used by the ODPS for new applications is Microsoft Visual Studio with Visual Studio 2012 being the latest version used today. New applications target the .Net 4.5 framework with the primary programming language being C#. The MVC design pattern is used for most new web projects.
JQuery	Presentation	For enhancement of the UI experience, the ODPS supports the use of JQuery, a set of third-party scripts distributed by Microsoft, to enhance the productivity of developing JavaScript code.
JavaScript	Presentation	JavaScript is used to provide client-side validation and functionality, but all validation should also occur at the server level.
Windows Communication Foundation 4.5 (WCF)	Application	For the development of services and exposing access to data, WCF is used for all new web services interfaces. WCF is a set of libraries within the .NET Framework 4.5 specific for developing and hosting services.
Windows Server 2008 R2	All	Operating system used in the entire hosting environment.
Microsoft Internet Information Services (IIS) 7.5	All	Web services.
SQL Server 2012 Database	Database	Database engine. The use of CLR stored procedures and database triggers is discouraged.
SQL Server 2012 Reporting Services (SSRS)	Application	SSRS is the technology of choice for developing and running data-intensive reports.
SQL Server 2012 Integration Services (SSIS)	Database	SSIS is the technology of choice for developing functionality for batch processing.
Microsoft AppFabric	Presentation, Application	Session management for internal side.
Microsoft SQL Server Session State Management	Presentation, Application	Session management for external side.

Design/Programming Considerations

The programming style needs to follow object oriented principles. Procedural based programming styles are to be avoided as they can drive up the development costs for future enhancements and maintenance efforts.

Regarding business logic, all validation, edits, and logic should be exposed and implemented at the Application tier. Business logic should not be found at the Database tier in stored procedures. All database access at the ODPS is provided by calling given store procedures with few exceptions.

SQL Server Reporting Services will be used for reporting requirements. Application design should take the infrastructure into account with programming reporting requirements.

All applications should log errors to the Event Log. All applications should implement exception shielding for any unexpected errors encountered while using an application. The application should make the end user aware that an error has occurred and is being handled.

Third Party Tools & Add-ons

The use of third party tools or technologies is discouraged and should be used only in instances where recommended technologies don't provide the functionality required.

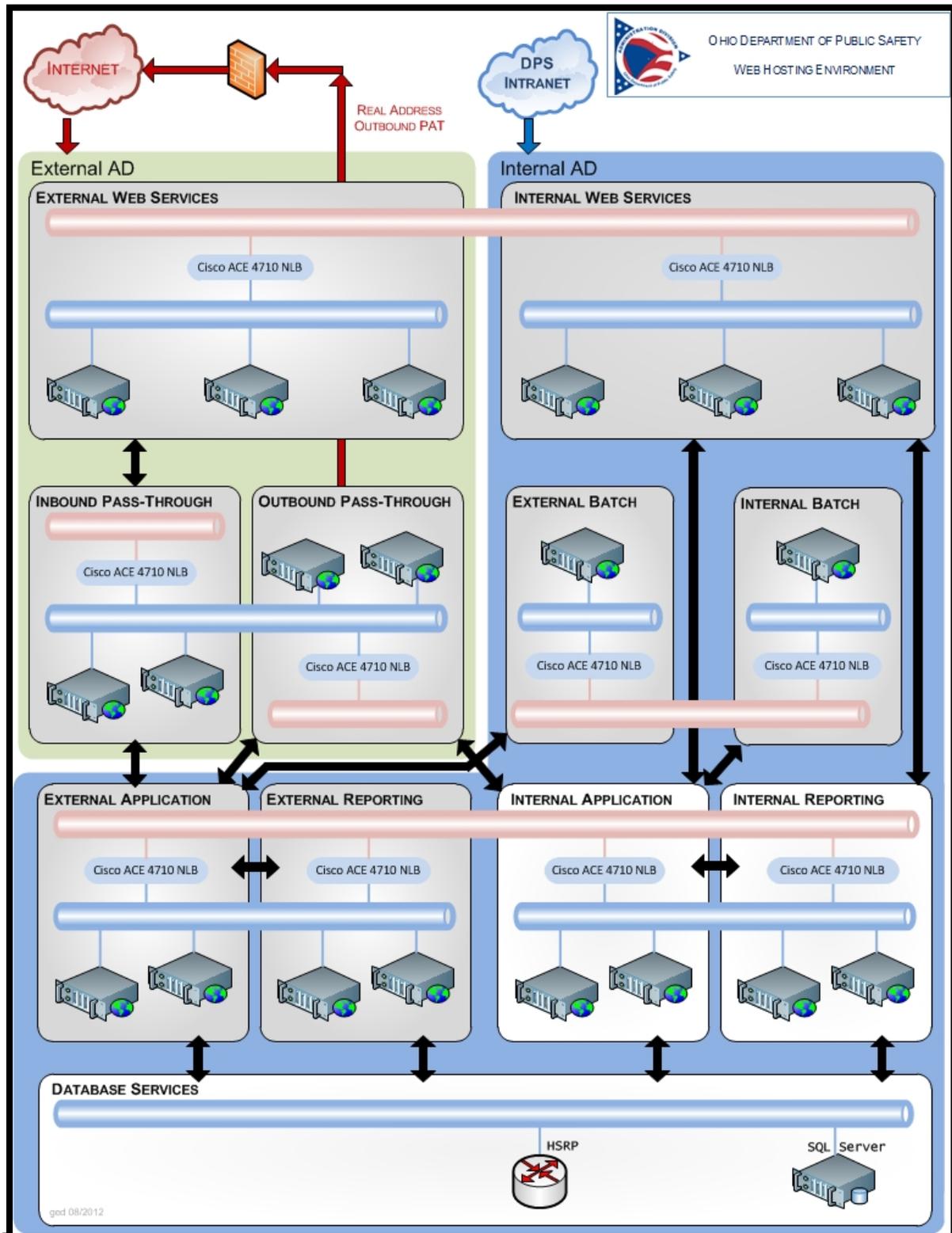
One major reason for listing this concern relates to end-user licensing agreements and maintenance. Examples of tools and technologies not recommended include nHibernate, Crystal Reports, and Log4Net.

Security

When functionality requires that security be implemented, every effort will be made to use a role-based, Windows Integrated Security model. Active Directory is to be leveraged both internally and externally for managing access to systems and the functionality it can expose. If more granular security requirements exist, table-based security can be used in conjunction with Windows integrated security.

All hosted web services will be done with IIS and have dedicated application pools configured. All applications will have dedicated service accounts.

All applications may be subject to vulnerability scans.



Supplement 3 —
Current Regular Registration
(BMV4621) Front and Back

OHIO BMV REGISTRATION CARD APPLICATION NO. 1234									
LICENSE NO. WWW1234	AGENCY NO. TEST	ISSUE DATE 12/09/2013	EXPIRATION DATE 12/31/2014	WEIGHT 04000	REG CODE (1) CLASS XX TYPE X				
VEH. SERIAL NO. 11TEST1VIN1TEST11	VEH. YEAR 2000	MAKE TEST	VEH. TYPE PASS	REG YEARS 2000	CODE (2) XX	CODE (3) X			
TITLE 1TEST1TITLE1		DATE PURCHASED 10/10/2010	SPECIAL PLATE TEST		SEATING CAP. 5				
OWNER NAME SAMUEL L SAMPLE			5.00 varSPECIALFEE	PLATE FEE 25.00	REG. FEE 20.00				
ADDITIONAL NAME STEVE SAMPLE			TAXING DISTRICT SAMPLE	LOCAL TAX 10.00	TOTAL FEE 60.00				
OWNER ADDRESS 1 TEST RD			COUNTY SAMPLE	LEASE / TAX I.D. NO. 123456789					
CITY / TOWNSHIP SAMPLE CITY	POST OFFICE SAMPLE CITY	STATE VOH	ZIP 12345-6789	CONTROL NO. TEST11CONTROL11					
OLD APPLICATION TEST		OLD PLATE TEST							

WWW1234 TEST 0001 PASS 0001 **
SAMUEL L SAMPLE
1 TEST RD
SAMPLE CITY OH 12345

Form OHCURR - BMV 4621 06/11 0001

OHIO BMV REGISTRATION CARD APPLICATION NO. 1234									
LICENSE NO. WWW1234	AGENCY NO. TEST	ISSUE DATE 12/09/2013	EXPIRATION DATE 12/31/2014	WEIGHT 04000	REG CODE (1) CLASS XX TYPE X				
VEH. SERIAL NO. 11TEST1VIN1TEST11	VEH. YEAR 2000	MAKE TEST	VEH. TYPE PASS	REG YEARS 2000	CODE (2) XX	CODE (3) X			
TITLE 1TEST1TITLE1		DATE PURCHASED 10/10/2010	SPECIAL PLATE TEST		SEATING CAP. 5				
OWNER NAME SAMUEL L SAMPLE			SPECIAL FEE 5.00	PLATE FEE 25.00	REG. FEE 20.00				
ADDITIONAL NAME STEVE SAMPLE			LOCAL TAX 10.00	TOTAL FEE 60.00					
LEASE / TAX I.D. NO. 123456789			CONTROL NO. 123456789	OLD APPLICATION TEST		OLD PLATE TEST			

CUT HERE

INSTRUCTIONS:

- 1) Remove decal by bending paper along dotted line
- 2) Lift edge of decal and slowly peel.
- 3) See back side for instructions.



This is your Registration Card. Do Not Discard.

DISPLAY OF STICKERS

County Stickers

Place sticker on clean, dry surface. If plate has a previous sticker attached, place new sticker to cover old sticker.

NOTE: Do not moisten sticker or apply at temperatures less than 0° F.

NOTE: 4503.19 of the Ohio Revised Code requires that a motor vehicle certificate of registration have a supplemental portion that contains all the information contained in the main portion of the certificate except for the address of the person to whom the certificate is issued.

In compliance with the law, County stickers are required to be placed on all license plates except dealer plates and commercial truck/trailer plates.

County number stickers shall be affixed to the lower left side of both the front and rear plates.

For motorcycle/moped plates, affix the county number sticker on the lower left side of plate just right of the bolt hole.

STANDARD PLATE



Validation Sticker

Place new validation sticker in lower right corner of rear plate. (commercial truck/tractor: front plate)

MOTORCYCLE/
MOPED PLATE



For motorcycle/moped plates affix new validation sticker to the lower right hand side of plate just left of the bolt hole.

VEHICLE REGISTRATION CODES

Code (1) - CLASS and (2) OLD VEH CLASS	Code (3) - Owner	TYPE
PC (Passenger Car)	TK (Transit Bus)	X (Commercial)
TK (Comm Truck)	NC (Non Comm Truck)	Y (Joint)
FM (Farm Truck)	MP (Moped)	L (Lease)
TL (Comm Trailer)	RV (Snowmobile, ATV)	S (Single)
HV (House Vehicle)	MH (Motor Home)	R (Rental)
MC (Motorcycle)	NT (Non Comm Trailer)	T (Trust)
CB (Church Bus)	SB (School Bus)	A (New/Renewal)
BU (Bus)	DX (Disability Placards)	B (Replace/Renewal)
		D (Duplicate Registration)
		N (New)
		P (Exchange/New)
		Q (Replacement)
		R (Renewal)
		W (Release/Assignment)
		X (Exchange)

FIELD WIDTHS OF REGULAR REGISTRATION FORM

FIELD	FORM DESIGN MAXIMUM CHARACTERS	FIELD	FORM DESIGN MAXIMUM CHARACTERS
WEIGHT	8	CITY/TOWNSHIP	21
DATE PURCHASED (MM/DD/YYYY)	10*	POST OFFICE	18
COUNTY	6	STATE	4
AGENCY NO.	6	ZIP	12
ISSUE DATE (MM/DD/YYYY)	10*	VEH. SERIAL NO.	22
EXPIRATION DATE (MM/DD/YYYY)	10*	SOCIAL SECURITY/TAX I.D.	20
CONTROL NUMBER	16	CERTIFICATE OF TITLE NO.	24
LICENSE NO.	12	OLD PLATE NO.	10
REG CODE (1)		OLD APP NO.	10
REG CLASS	3	SPECIAL PLATE	24/LINE
TYPE	3	ODOMETER	10
LOCAL TAX	7	SEATING CAPACITY	2
REGISTRATION FEE	9	LEASE TAX I.D. NUMBER	20
PLATE FEE	9	ADDITIONAL NAME	40
SPEC FEE	9		
OWNER NAME	40		
CODE (2)	3		
CODE (3)	3		
OWNER'S RESIDENCE- TAXING DISTRICT	19		
TOTAL FEE	10		
OWNER HOME ADDRESS	32		
TYPE (VEH)	4		
VEH YR.	6		
MAKE	6		

NOTE: * For new design self-mailer form, field widths shown above for present mailer form may be adjusted (subject to BMV approval) to fit new form design layout.

* Add (MM/DD/YYYY) in the date box headings to define the order of the date characters, as illustrated in Exhibits D and H.

Supplement 5 —
Current Dealer Registration
(BMV4391) Front and Back

STATE OF OHIO - BUREAU OF MOTOR VEHICLES
DEALER REGISTRATION CARD

APPLICATION NO. 2013TEST

PLATE / STICKER NUMBER OHTEST	DOCUMENT COUNT 100	PERMIT NUMBER TEST01	LICENSE YEAR 2013	DATE ISSUED 02/02/2012	DATE EXPIRES 02/02/2013
DEALER BUSINESS NAME JOHN DOE SAMPLE DEALER CO			TAXING DISTRICT TEST	FEE 20.00	
ADDRESS 123 TESTING MEMORIAL PKWY SUITE 1A					REGISTRATION CODES CLASS PC
CITY SAMPLE CITY					TYPE X
STATE OH	ZIP CODE 12345-1234	COUNTY TEST			

The owner is hereby registered in accordance with the Laws of Ohio Revised Code Sections, 4503.09 and 4503.27 through 4503.34, where applicable to the type of license plate indicated above. This registration must be carried by the operator and is subject to inspection by any police officer.

JOHN Q PUBLIC
123 SAMPLE BLVD
SAMPLE CITY OH 12345-1234

Form OHDEALCURRENT - BMV 4391 06/11 1 - 1

Place sticker on clean, dry surface. If plate has a previous sticker attached, place new sticker to cover old sticker.

NGTE: Do not moisten sticker or apply at temperatures less than 0° F.

INSTRUCTIONS:

- 1) Remove decal by bending paper along dotted line
- 2) Lift edge of decal and slowly peel.
- 3) See back side for instructions.



This is your Registration Card. Do Not Discard.

DISPLAY OF STICKERS

County Stickers

Place sticker on clean, dry surface. If plate has a previous sticker attached, place new sticker to cover old sticker.

NOTE: Do not moisten sticker or apply at temperatures less than 0° F.

NOTE: 4503.19 of the Ohio Revised Code requires that a motor vehicle certificate of registration have a supplemental portion that contains all the information contained in the main portion of the certificate except for the address of the person to whom the certificate is issued.

In compliance with the law, County stickers are required to be placed on all license plates except dealer plates and commercial truck/trailer plates.

County number stickers shall be affixed to the lower left side of both the front and rear plates.

For motorcycle/moped plates, affix the county number sticker on the lower left side of plate just right of the bolt hole.

STANDARD PLATE



Validation Sticker

Place new validation sticker in lower right corner of rear plate.
(commercial truck/tractor: front plate)

**MOTORCYCLE/
MOPED PLATE**



For motorcycle/moped plates affix new validation sticker to the lower right hand side of plate just left of the bolt hole.

VEHICLE REGISTRATION CODES

Code (1) - CLASS and (2) OLD VEH CLASS	Code (3) - Owner	TYPE
PC (Passenger Car)	X (Commercial)	A (New/Renewal)
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HV (House Vehicle)	R (Rental)	P (Exchange/New)
MC (Motorcycle)	T (Trust)	Q (Replacement)
CB (Church Bus)		R (Renewal)
BU (Bus)		W (Release/Assignment)
TB (Transit Bus)		X (Exchange)
NC (Non Comm Truck)		
MP (Moped)		
RV (Snowmobile, ATV)		
MH (Motor Home)		
NT (Non Comm Trailer)		
SB (School Bus)		
DX (Disability Placards)		

FIELD WIDTHS FOR DEALER REGISTRATION FORM

FIELD	FORM DESIGN MAXIMUM CHARACTER
PLATE/STICKER NUMBER	17
DOCUMENT COUNT	14
PERMIT NUMBER	12
LICENSE YEAR	12
DATE ISSUED (MM/DD/YYYY)	10*
DATE EXPIRES (MM/DD/YYYY)	10*
DEALER BUSINESS NAME	53
TAXING DISTRICT	13
FEE	11
ADDRESS	53
REGISTRATION CODES	
CLASS	10
TYPE	7
USE	7
CITY	41
STATE	6
ZIP CODE	17
COUNTY	17

- NOTE:
- * For new design self-mailer form, field widths shown above for present mailer form may be adjusted (subject to BMV approval) to fit new form design layout.
 - * Add (MM/DD/YYYY) in the date box headings to define the order of the date characters.



201 Physical Standards

Overview

- 1.0 Physical Standards for Machinable Letters and Cards
- 2.0 Physical Standards for Nonmachinable Letters
- 3.0 Physical Standards for Machinable and Automation Letters and Cards

1.0 Physical Standards for Machinable Letters and Cards

1.1 Physical Standards for Machinable Letters

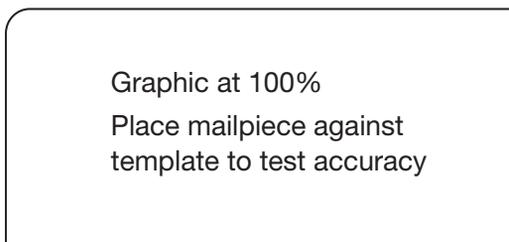
1.1.1 Dimensional Standards for Letters

Machinable letter-size mail is:

- a. Not less than 5 inches long, 3-1/2 inches high, and 0.007-inch thick.
 1. 0.007 inch thick if no more than 4-1/4 inches high and 6 inches long; or
 2. 0.009 inch thick if more than 4-1/4 inches high or 6 inches long, or both.
- b. Not more than 11-1/2 inches long, or more than 6-1/8 inches high, or greater than 1/4-inch thick.
- c. Rectangular, with four square corners and parallel opposite sides. Letter-size, card-type mailpieces made of cardstock may have finished corners that do not exceed a radius of 0.125 inch (1/8 inch). See [Exhibit 1.1.1e](#).
- d. Within an aspect ratio (length divided by height) of 1.3 to 2.5, inclusive. See [601.1.4](#).
- e. Subject to additional dimensional restrictions in 3.0, depending on mailpiece design.

Exhibit 1.1.1e Maximum Corner Radius for Letter-Size, Card-Type Mailpieces

Corner Radius Maximum 1/8"



1.1.2 Weight Standards for Machinable Letters

The maximum weight for Presorted First-Class Mail machinable letters is 3.3 ounces (0.2063 pound). The maximum weight for Standard Mail machinable letters is 3.3 ounces (0.2063 pound).



201.1.1.3

1.1.3 All Machinable Letters

All machinable letters must meet the additional standards for automation-compatible letters in [3.0](#).

1.2 Physical Standards for Cards Claimed at Card Prices

1.2.1 Dimensional Standards for Cards

Each card (each stamped card or postcard or each half of a double stamped card or postcard) claimed at a card price must be:

- a. Not less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick.
- b. Not more than 4-1/4 inches high, or more than 6 inches long, or greater than 0.016 inch thick.
- c. Rectangular, with four square corners and parallel opposite sides. Card-size pieces meeting the standards in 1.2.1 may have finished corners that do not exceed a radius of 0.125 inch (1/8 inch). See [Exhibit 1.1.1e](#).

1.2.2 Other Cards

A card that does not meet the applicable standards in [1.2](#) must not bear the words “Postcard” or “Double Postcard.”

1.2.3 Paper or Cardstock

A card must be of uniform thickness and made of unfolded and uncreased paper or cardstock of approximately the quality and weight of a stamped card (i.e., a card available from the USPS). A card must be formed either of one piece of paper or cardstock or of two pieces of paper permanently and uniformly bonded together. The stock used for a card may be of any color or surface that permits the legible printing of the address, postmark, and any required markings.

1.2.4 Acceptable Attachments

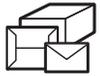
A card may bear an attachment that is:

- a. A paper label, such as a wafer seal or decal affixed with permanent adhesive to the back side of the card, or within the message area on the address side (see [1.2.6](#)), or to the left of the address block.
- b. A label affixed with permanent adhesive for showing the delivery or return address.
- c. A small reusable seal or decal prepared with pressure-sensitive and nonremovable adhesive that is intended to be removed from the first half of a double card and applied to the reply half.

1.2.5 Unacceptable Attachment

A card may not bear an attachment that is:

- a. Other than paper.
- b. Not totally adhered to the card surface.
- c. An encumbrance to postal processing.



1.2.6 Address Side of Cards

The address side of a card is the side bearing the delivery address and postage. The address side may be formatted to contain a message area. Cards that do not contain a message area on the address side are subject to the applicable standards for the price claimed. For the purposes of 1.2, miscellaneous graphics or printing, such as symbols, logos, or characters, that appear on the address side of cards not containing a message area are generally acceptable provided the items are not intended to convey a message. Cards claimed at the Presorted or automation card prices that contain a message area on the address side must be divided vertically or horizontally and meet the following additional standards, as applicable:

- a. Vertically divided cards.
 1. The address side of the card must be divided into a right portion and a left portion, with or without a vertical rule. The left portion is the message area.
 2. The delivery address, postage, and any USPS marking or endorsement must appear in the right portion. The right portion must be at least 2-1/8 inches wide (measured from the right edge of the card, top to bottom inclusive).
 3. For cards claimed at the Presorted price, nondelivery address information may extend into the right portion only above the address block and if the information is shaded or surrounded by a border that has at least 1/8 inch clearance between the delivery address block and the border. Mailers may choose not to shade or border the nondelivery address information if there is at least 1/8 inch of clear space around the delivery address block.
 4. For cards claimed at the automation price, the standards for automation-compatible mail in 3.0, and 202.5.0, must be met.
- b. Horizontally divided cards.
 1. The address side of the card must be divided into an upper portion and a lower portion, with or without a horizontal rule. The portion of the address side that does not contain the delivery address is the message area.
 2. The delivery address, postage, and any USPS marking or endorsement must appear within the portion containing the delivery address. As an alternative, when the delivery address appears within the lower portion, it is permissible for the postage, return address, and any USPS marking or endorsement to appear in the upper portion. The portion bearing the delivery address must be at least 1-1/2 inches high (measured from the top or bottom edge of the card, as applicable, right edge to left edge inclusive).
 3. For cards claimed at the Presorted price, nondelivery address information may extend into the portion containing the delivery address only if it appears above the address block and if the information is shaded or surrounded by a border that has at least 1/8 inch clearance between the delivery address block and the border. Mailers may choose not to shade or border the nondelivery address information if there is at least 1/8 inch of clear space around the delivery address block.



201.1.2.7

4. For cards claimed at the automation price, the standards for automation-compatible mail in [3.0](#), and [202.5.0](#), must be met.

1.2.7 Tearing Guides

A card may have perforations or tearing guides if they do not eliminate or interfere with any address element, postage, marking, or endorsement and do not impair the physical integrity of the card.

1.2.8 Double Cards

A double card (a double stamped card or double postcard) consists of two attached cards, one of which is designed to be detached by the recipient and returned by mail as a single card. Double cards are subject to these standards:

- a. The reply half of a double card must be used for reply only and may not be used to convey a message to the original addressee or to send statements of account. The reply half may be formatted for response purposes (e.g., contain blocks for completion by the addressee).
- b. A double card must be folded before mailing and prepared so that the address on the reply half is on the inside when the double card is originally mailed. The address side of the reply half may be prepared as business reply mail, courtesy reply mail, meter reply mail, or as a merchandise return service label.
- c. Plain stickers, seals, or a single wire stitch (staple) may be used to fasten the open edge at the top or bottom once the card is folded if affixed so that the inner surfaces of the cards can be readily examined. Fasteners must be affixed according to the applicable preparation requirements for the price claimed. Any sealing on the left and right sides of the cards, no matter the sealing process used, is not permitted.
- d. The first half of a double card must be detached when the reply half is mailed for return.

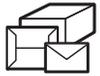
1.2.9 Enclosures in Double Cards

Enclosures in double postcards are prohibited at card prices.

2.0 Physical Standards for Nonmachinable Letters

2.1 Criteria for Nonmachinable Letters

A letter-size piece is nonmachinable if it has an exterior surface that is not made of paper or if it does not meet the standards in [3.0](#). Windows in envelopes made of paper do not make mailpieces nonmachinable. Attachments do not render mailpieces nonmachinable if allowed by eligibility standards according to the class of mail and if not prohibited in [3.0](#). In addition, a letter-size piece is nonmachinable if it weighs more than 3.3 ounces, unless it has a barcode, weighs no more than 3.5 ounces, and is eligible for and claims automation letter prices or Standard Mail Carrier Route (barcoded) letter prices.

**2.2 Additional Criteria for First-Class Mail Nonmachinable Letters**

Letter-size pieces (except cards) that meet one or more of the nonmachinable characteristics in 2.1 are subject to the nonmachinable surcharge (see 233.1.4). All letter-size pieces over 3.5 ounces are prepared as letters and charged the flat-size prices. An envelope weighing no more than one ounce with one enclosed standard optical disc no larger than 12 centimeters in diameter, that is mailed to or from a subscriber as part of a round-trip mailing under 233.2.8 and 505.1.0 (or 507.1.0), is not subject to the nonmachinable surcharge.

2.3 Additional Criteria for Standard Mail Nonmachinable Letters

The nonmachinable prices in 243.1.0 apply to Standard Mail letter-size pieces that have one or more of the nonmachinable characteristics in 2.1. Mailers must prepare all nonmachinable letters as described in 245.5.0.

2.4 Additional Criteria for Periodicals Nonmachinable Letters

The nonbarcoded letter prices in 707 apply to Periodicals letter-size pieces that have one or more of the nonmachinable characteristics in 2.1.

2.5 Priority Mail Express, Priority Mail, and Critical Mail Letters

Mailers are encouraged, but not required, to design and produce Priority Mail Express and Priority Mail letter-size pieces as machinable letters. Critical Mail letter-size pieces (see 223) that do not meet machinable letter standards in 1.0 and 3.0 are not eligible for Critical Mail letter prices, but are eligible for Priority Mail Commercial Plus Flat Rate Envelope prices.

3.0 Physical Standards for Machinable and Automation Letters and Cards**3.1 Basic Standards for Automation Letters and Cards**

Letters and cards claimed at any machinable, automation, or Standard Mail carrier route price, must meet the standards in 3.0. Unless prepared as a folded self-mailer, booklet, or postcard under 3.14 through 3.17, each machinable or automation letter must be a sealed envelope (the preferred method) or unenveloped. If unenveloped, each letter must be sealed or glued completely along all four sides or prepared under 3.15.

3.2 Paper Weight

Mailpieces should be constructed from high tear strength paper stock. All references in 3.0 to paper basis weight are for book-grade paper unless otherwise stated. The conversion table in Exhibit 3.2 provides a paper basis weight cross-reference.

**Commercial Letters: Physical Standards for Letters and Cards**

201.3.3

Exhibit 3.2 Paper Basis Weight Conversion Table**NOTE:**

Paper basis weight is based on the weight of 500 sheets of:

- 25 x 38 inch sheets of book-grade paper,
- 17 x 22 inch bond-grade paper,
- 20 x 26 inch sheets of cover-grade paper,
- 24 x 36 inch sheets of newsprint.

For example, if 500 sheets of book-grade paper weigh 39 pounds, the paper is considered 39-pound book paper.

Book Wt.	Bond Wt.	Cover Wt.	Newsprint Wt.
39	15	21	35
40	16	22	36
50	20	27	45
55	22	30	50
60	24	33	55
70	28	40	64
75	30	41	68
80	31	44	73
90	36	50	82
100	40	56	91
110	44	60	100
128	50	70	116

3.3 Dimensions and Shape

Each machinable or automation letter-sized piece must be rectangular (see 1.1.1) and must meet the following standards (see 3.15 for booklets):

- a. For height, no more than 6-1/8 or less than 3-1/2 inches high.
- b. For length, no more than 11-1/2 or less than 5 inches long.
- c. For thickness, no more than 0.25 or less than
 1. 0.007 inch thick *if no more than 4-1/4 inches high and 6 inches long; or*
 2. 0.009 inch thick *if more than 4-1/4 inches high or 6 inches long, or both.*

3.4 Standards for Letter-Size Pieces Containing One Disc (CD or DVD)**3.4.1 Basic Standards for One Disc in a Letter-Size Mailpiece**

A letter-size mailpiece containing one disc and meeting the general standards in 3.0 and the specific standards in 3.4.3 is considered automation-compatible. A mailpiece with one enclosed disc not meeting these standards must be tested and approved for automation-compatibility. For this purpose, mailers must submit 5 sample mailpieces and a written request to the local postmaster or business mail entry manager for submission to the Pricing and Classification Service Center (PCSC).

**3.4.2 Disc Size and Placement**

Position the disc symmetrically at the vertical centerline and as near to the top edge of the mailpiece as is practical. Secure the disc to prevent it from shifting more than 1/2 inch in any direction. The maximum disc size is:

- a. 120 mm (4.7 inches) in diameter.
- b. 2 mm (0.08 inch) in thickness.

3.4.3 Dimensions and Other Physical Standards for Automation-Compatible Enveloped Letters Containing Discs

Each enveloped letter must meet the basic standards for machinable letters in [1.0](#) and have the following characteristics:

- a. Height, not more than 6 inches or less than 5.5 inches high.
- b. Length, not more than 9.75 inches or less than 7.25 inches long.
- c. Thickness, not more than 0.25 inch or less than 0.009 inch thick.
- d. Weight, not more than 3 ounces.
- e. A piece up to 8 inches long must be made of paper with a minimum 70-pound basis weight or equivalent.
- f. A piece over 8 inches long (up to 9.75 inches long) must be made of paper with a minimum 80-pound basis weight or equivalent.
- g. Discs in mailpieces made of the minimum basis weight paper must be inserted into a protective sleeve.
- h. Not be a window envelope, unless tested and approved under [3.4.1](#).

3.4.4 Dimensions and Shape Standards for Automation-Compatible Unenveloped Disc Carriers

Each unenveloped disc carrier must meet the basic standards for machinable letters in [1.0](#) and have the following characteristics:

- a. Height, not more than 6 inches or less than 5.5 inches high.
- b. Length, not more than 9.75 inches or less than 7.25 inches long.
- c. Thickness, not more than 0.25 inch or less than 0.009 inch thick.
- d. Weight, not more than 3 ounces.
- e. Be prepared from paper stock meeting the industry standard for a basis weight of 75 pounds or greater, with none less than 71.25 pounds (measured weight for 500 25- by 38-inch sheets). The stock must be free from groundwood unless coated with a substance adding to the stock's ability to resist an applied bending force.
- f. Any folds or perforations in the mailpiece must be parallel to the address.
- g. Must meet the tabbing requirements for pieces prepared with folds or perforations parallel to the address provided in [3.14](#).



201.3.4.5

3.4.5 Unacceptable Characteristics for Automation-Compatible Letter-Size Pieces with Discs

Discs in letter-sized envelopes and unenveloped disc carriers may not be enclosed in: packaging such as plastic "clamshells," "plastic" "jewel cases," or inflexible cardboard sleeves.

3.5 Maximum Weight, Machinable and Automation Letters and Cards

The following maximum weight limits apply:

- a. Critical Mail letters - 3 ounces.
- b. Booklets and unenveloped disc carriers - 3 ounces.
- c. Machinable enveloped letters and cards - 3.3 ounces.
- d. Automation enveloped letters and cards - 3.5 ounces (see [3.6](#) for pieces over 3 ounces.)

3.6 Heavy Letter Mail (over 3 ounces)

Heavy letter mail (letter-size pieces over 3 ounces) must be prepared in a sealed envelope, may not contain stiff enclosures, and must have an 11-digit delivery point POSTNET or an Intelligent Mail barcode with a routing code in the address block (see [202.5.0](#)).

3.7 Aspect Ratio

The aspect ratio (length of the mailpiece divided by height) must be between 1.3 and 2.5, inclusive. Length and height are defined in [601.1.4](#).

3.8 Wraps and Closures

An automation-compatible mailpiece may not be polywrapped, polybagged, or shrinkwrapped; have clasps, strings, buttons, or similar closure devices; or have protrusions that might impede or damage the mail or mail processing equipment.

3.9 Staples and Saddle Stitching

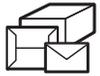
Staples or saddle stitching may be used only on booklet-type mailpieces to join the bound edge (spine). Inserted staples or stitching must parallel the bound edge, seat tightly and securely, and have no protrusions that might impede or damage the mail or mail processing equipment.

3.10 Rigid and Odd-Shaped Items

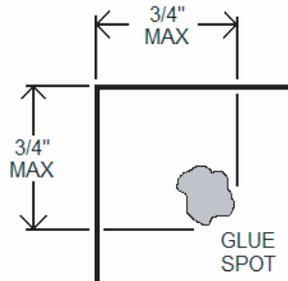
Rigid items (e.g., pens, pencils, keys, bottle caps) are prohibited within mailpieces. Reasonably flexible items (e.g., credit cards) are permitted. Subject to [3.12](#), odd-shaped items (e.g., coins and tokens) are permitted if firmly affixed to and wrapped within the contents of the mailpiece and envelope to streamline the shape of the mailpiece for automated processing.

3.11 Tabs, Tape, and Glue

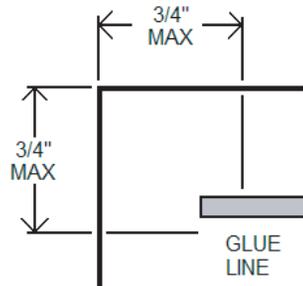
Tabs may be made of paper, translucent paper, vinyl or plastic. Cellophane tape may be used as a closure when the saw-toothed cut edge is placed parallel to the edge being sealed. Tabs must not contain perforations. For tab size and placement for folded self-mailers see [3.14](#); for booklets see [3.15](#). Tab placement is subject to 1/4 inch variance in either direction. The following standards also apply:



- a. Translucent paper tabs should be made of paper with a minimum of 40-pound basis weight.
- b. Opaque paper tabs should be made of a minimum of 60-pound basis weight paper with a tear strength of at least 56 grams of force in the machine direction (MD) and 60 grams of force in the cross direction (CD).
- c. When a barcode clear zone is required under [202.5.1](#), tabs in the barcode clear zone must have a paper face meeting the standards for background reflectance and, if the barcode is not preprinted by the mailer, the standards for acceptance of water-based ink.
- d. Vinyl tabs and cellophane tape closures are not acceptable within the barcode clear zone.
- e. Tabs must be tight against the edge of the mailpiece. A maximum 1/16-inch overhang is recommended.
- f. Glue spots may be used in lieu of tabs (as indicated in [Exhibit 3.16.5](#) through [Exhibit 3.16.8](#)) and must be placed within 3/4 inch of the open edges (see [Exhibit 3.11f](#)).

Exhibit 3.11f Glue Spot Placement

- g. Continuous glue lines may be used as cover-to-cover seals for specific designs. When using glue as a sealing method, it must be placed along the entire length of the open edge and end no more than 3/4-inch from the open ends (see [Exhibit 3.11g](#)) unless standards require use of a continuous 1/8-inch wide glue line under [3.11h](#). For folded self mailers see [3.14.4b](#).

**Exhibit 3.11g Glue Line Placement**

- h. Continuous, 1/8-inch wide, glue lines must be placed along the entire length of the open edge and end within 1/4-inch of the open ends. The selvage along the open edge must not exceed 1/4 inch. Glue lines created with a permanent adhesive that is not tacky when dry are preferred.
- i. Die-cut flaps, those with irregular shapes, must be well sealed to the non-address side panel using tabs, glue spots or elongated glue lines; however, a 1/8 inch continuous glue line that follows and seals the contour of the shape is highly recommended.

3.12 Flexibility Standards for Automation Letters**3.12.1 Machinability**

To ensure transport through automated mail processing machines, a mailpiece and its contents must bend easily when subjected to a transport belt tension of 40 pounds around an 11-inch-diameter drum.

3.12.2 USPS Services for Flexibility Testing

A mailer requesting flexibility testing for letter-size mailpieces must submit at least 5 mailpieces and a written request to their local postmaster or business mail entry manager for submission to the Pricing and Classification Service Center (PCSC) at least 6 weeks before the mailing date. The request must describe mailpiece contents and construction, number of pieces being produced, and preparation level. The PCSC will evaluate the piece and, if warranted, will instruct the mailer to submit samples to USPS Engineering for testing. The PCSC advises the mailer of its findings. If the mailpiece is approved, the letter includes a unique number identifying the piece and serves as evidence that the piece meets the relevant standards. A copy of the letter must accompany each postage statement submitted for mailings of the approved piece. If requested by the USPS, the mailer must show that pieces presented for mailing are the same as those approved.



3.13 Labels, Stickers, Release Cards, and Perforated Pockets Affixed to the Outside of Letter-Size Mailpieces

3.13.1 Use

A label, sticker, perforated pocket (under 3.13.6 and 3.13.7), or release card may be placed on a letter-sized mailpiece that is eligible for automation letter prices, including barcoded carrier route letters meeting automation standards. Release cards and perforated pockets may not be affixed to pieces mailed at First-Class Mail card prices; see 1.2 for other restrictions on attachments to cards. A Standard Mail or Periodicals letter with a label, sticker, release card or perforated pocket must meet additional standards in 243.2.5 These attachments may be:

- a. A label or sticker less than 0.007 inch thick, and a perforated pocket other than repositionable notes affixed under 705.22.0, as follows:
 1. A permanent label or sticker, or perforated pockets under 3.13.7d2 (designed not to be removed or relocated), affixed directly to the outside of the mailpiece with permanent adhesive.
 2. A relocatable label, to be placed on the outside of, or on the contents of, a reply mailpiece. Labels must be affixed under 3.13.2 or 3.13.3.
- b. Up to two release cards, each at least 0.007 inch and no more than 0.012 inch thick, secured to a letter with a liner or backing under 3.13.4.
- c. On pieces mailed at First-Class Mail, Periodicals, or Standard Mail prices, only if permitted by the applicable content and eligibility standards.

3.13.2 Pressure-Sensitive Label

Any pressure-sensitive label or sticker affixed directly to a mailpiece before mailing must have a minimum peel adhesion to stainless steel of 8 ounces/inch. This standard does not apply to pressure-sensitive labels provided by the USPS to label bundles to sortation levels.

3.13.3 “Sandwich” Label

A face stock/liner label (“sandwich” label) is a two-part unit with a face stock (top label) attached to a liner (bottom label) affixed to the mailpiece. The face stock must have a peel adhesion value of at least 2 ounces/inch with respect to the liner label and at least 8 ounces/inch when reapplied to stainless steel.

3.13.4 Letter-Size Piece with Attached Release Card

A letter-size mailpiece, with one or two attached release cards, must have the following characteristics:

- a. Be between 8 and 9-1/2 inches long (inclusive). With one release card affixed, be between 4 and 6 inches high (inclusive); with two release cards affixed, be between 5-1/2 and 6 inches high (inclusive).
- b. No address element, including any address block barcode, may be closer than 1 inch to the right edge of the mailpiece.
- c. The surface smoothness of all letter-size pieces must be at least 190 Sheffield Units.



Commercial Letters: Physical Standards for Letters and Cards

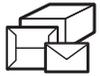
201.3.13.5

- d. Enveloped letters must be made of paper with a minimum 60-pound book grade paper and have a maximum thickness of 1/8 (0.125) inch. Window envelopes must have only one closed panel address window, no larger than 1-1/2 x 4-1/4 inches.
- e. Card-type letters, not mailed at card prices, have a maximum thickness of 0.025 inch as mailed.
- f. All letter-size pieces other than enveloped letters and card-type pieces (such as folded self-mailers and booklets) must have a maximum thickness of 0.10 inch as mailed. Mailpieces with two affixed release cards must meet the following additional conditions:
 - 1. Pieces requiring tabs must be sealed with 1-1/2inch nonperforated tabs, unless larger tabs are required by standards for the specific mailpiece design.
 - 2. Booklets must have a minimum cover weight of 70-pound book-grade paper (see 3.2)
 - 3. Folded self-mailers must have a minimum cover weight of 100-pound book-grade paper (see 3.2).
- g. Content insert shift must be no more than 5/8 inch horizontally and no more than 1/4 inch vertically.
- h. Release cards must meet the standards in 3.13.5.

3.13.5 Standards for Release Cards

One or two release cards, each at least 0.007 inch thick and no more than 0.012 inch thick, attached to a letter-size mailpiece must:

- a. Be rectangular, but allowed with finished corners having a radius of at least 1/8 inch up to 1/2 inch.
- b. Be between 2 and 2-1/2 inches (inclusive) high, and between 3 and 3-1/2 inches (inclusive) long. Affix each card with either edge parallel to the length of the mailpiece. Affix two cards on the same side of the mailpiece under these conditions:
 - 1. Stack cards vertically, one above the other, on the same side (address side or nonaddress side), or
 - 2. Affix the cards side-by-side across the mailpiece length on the nonaddress side only.
- c. Be affixed no closer to the bottom edge of the mailpiece than 7/8 inch and no further away from the bottom edge than 1-1/2 inches, and must not interfere with readability of the address, barcode, or postage information. When affixing two cards, these additional conditions apply:
 - 1. When affixing cards one above the other on the address side, maintain a space of at least 1/2 inch from the leading edge, the trailing edge and the top edge.

**Commercial Letters: Physical Standards for Letters and Cards**

201.3.13.6

2. When affixing cards one above the other on the nonaddress side, the right edge of the cards must be placed between 5 and 6 inches from the leading edge of the mailpiece, but no closer than 1/2 inch from the trailing edge. Maintain a space of at least 1/2 inch from the top edge.
 3. When affixing cards side by side on the nonaddress side, the right edge of the leftmost card must be placed at least 5 inches from the leading edge of the mailpiece, and the rightmost card must be placed at least 1/2 inch from the trailing edge of the mailpiece. Maintain a space of at least 1/2 inch from the top edge.
- d. Be affixed by machine to ensure adequate adhesion. Manually affixed attachments are not allowed.
 - e. Be affixed to a liner (backing) and meet the following adhesion standards:
 1. Adhesive used to affix the backing to the mailpiece must have a peel adhesion of at least 2 pounds/inch to stainless steel with a 20 minute dwell time, at 300"/minute at 90 degrees per ASTM test D3330F.
 2. Adhesive used to attach the release card to the backing must have a peel adhesion of at least 1.5 ounces/inch to stainless steel with a 30 minute conditioning time, at 300"/minute at 90 degrees per ASTM test D3330F.

3.13.6 Letter-Size Pieces with Perforated Pockets

Perforated pockets are permanent attachments to letter-sized mailpieces that may be opened to reveal a small printed insert. Advertising may be printed on the components used to create a perforated pocket and on the printed insert within. Perforated pockets may not be used to conceal or contain matter bearing personal information except as provided in [243.2.2](#). Perforated pockets may be used on letter-size Standard Mail and Periodicals and are not considered sealed against Postal inspection. When affixed to Periodicals mail, advertising printed on the perforated pocket and any inserted matter is counted as part of the total advertising content of the host publication. Pockets may be used in lieu of labels to bear a permit imprint indicia showing that postage is paid if indicia information does not appear on the perforated panel or on the perforations used to create the perforated panel. A maximum of two perforated pockets are permitted on eligible letter-size mailpieces that have the following characteristics:

- a. Be between 8 inches and 9-1/2 inches long (inclusive).
- b. Be between 4 inches and 5-1/2 inches high (inclusive).
- c. Mailpieces must be prepared of book grade paper or equivalent with a minimum weight of:
 1. Envelopes - 60 pound
 2. Booklets - 70 pound
 3. Folded Self-Mailers - 100 pound
 4. Oversized card-type letters paid at letter prices must be at least .012 in thickness.



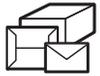
201.3.13.7

- d. Perforated pockets may be affixed to the nonaddressed side of envelopes with one closed panel address window. Perforated pockets must be placed one inch closer to the trailing edge than the window.
- e. If tabs are used to seal a folded self-mailer prepared with perforated pockets the folded self-mailer must be sealed with 1-1/2 inch nonperforated tabs placed 1" from the top on the leading and trailing edges.

3.13.7 Standards for Perforated Pockets

Perforated pockets may be attached to a letter-size mailpiece when the following conditions are met:

- a. The perimeter of the pocket is affixed with permanent glue with a minimum adhesive strength of 2 lbs/inch to stainless steel with 20 minute dwell time at 300° minute at 90 degrees per ASTM Test D3330F.
- b. The attached material has a minimum tear strength of 100gf (MD) and (CD) per TAPPI T414.
- c. The cut/tie ratio for perforation is 1:1 with a minimum tie size of 1 mm. One double cut may be made at the lower trailing edge corner of the perforated panel of the pocket.
- d. The pocket is:
 - 1. Between 1-1/2 inches and 2-3/4 inches in both height and length.
 - 2. Has an affixed area no more than 0.012 inch thick and a perforated panel no more than 0.03 inch thick. Perforated pockets may not exceed the thickness of the host mailpiece. They may not cause the host to have an uneven surface and must not interfere with readability of the address, barcode, or postage information.
- e. The length of each pocket is parallel to the length of the host mailpiece.
- f. Attached to the address side of a mailpiece they are:
 - 1. At least 1 inch from the bottom and leading edge.
 - 2. At least 1/2 inch from the top and trailing edge.
- g. Pockets attached to the nonaddressed side of the mailpiece are:
 - 1. At least 1 inch from the bottom edge.
 - 2. At least 1/2 inch from the top.
 - 3. At least 5 inches from the left edge but no closer than 1/2 inch from the right edge.
- h. Two perforated pockets are affixed on the same side of the mailpiece under these conditions:
 - 1. Stack perforated pockets vertically, one above than the other. Do not affix the pockets side by side across the mailpiece length.
 - 2. A space up to 1/2 inch is allowed between pockets.



3.14 Folded Self-Mailers

3.14.1 Definition

A folded self-mailer is formed of two or more panels that are created when one or more unbound sheets of paper are folded together and sealed to make a letter-size mailpiece. The number of panels is determined by the number of sheets in the mailpiece and the number of times the sheets are folded. (For double cards see [1.2.8](#).)

3.14.2 Physical Characteristics

Folded self-mailers have the following characteristics:

- a. Height: A minimum of 3-1/2 inches and a maximum of 6 inches.
- b. Length: A minimum of 5 inches and a maximum of 10-1/2 inches.
- c. Thickness: A minimum of 0.007 inch; (0.009 inch if the height exceeds 4-1/4 inches or if the length exceeds 6 inches); the maximum thickness is 1/4 inch.
- d. Maximum Weight: 3 ounces.
- e. Rectangular, with four square corners and parallel opposite sides.
- f. Aspect ratio: within 1.3 to 2.5 (see [3.7](#)).
- g. Maximum number of panels: 12, except under [3.14.2h](#).
- h. Quarter-folded self-mailers made of a minimum of 70-pound book grade paper may have as few as 4 panels. Quarter-folded self-mailers made of 55 pound or greater newsprint must have at least 8 panels and may contain up to 24 panels.

3.14.3 Panels

Panels are created when a sheet of paper is folded. Each two-sided section (front and back) created by the fold is considered one panel. When a folded self-mailer is made of multiple sheets, multiply the number of sheets by the number of panels created when folding a single sheet to determine the total number of panels. The following conditions apply:

- a. External panels created by folding must be equal or nearly equal in size.
- b. The final folded panel creates the back (non-address) side of the mailpiece. The open edge of the back panel must be at the top or within 1 inch of the top or trailing edge of the mailpiece. For horizontal folded tri-fold or multi-fold pieces, the addressed panel may be the final folded panel if the leading edge is sealed according to [3.14.4a](#).
- c. The final folded edge must be the bottom of a folded self-mailer unless prepared as an oblong. The final folded edge of an oblong folded self-mailer must be the leading (right) edge.
- d. Internal shorter panels must be covered by a full-size panel, and count toward the maximum number of panels. Optionally, internal shorter panels may be secured but must have only one edge that is shorter and be no further than one inch away from the edge of the external panel.
- e. Folding methods and the subsequent number of panels created when folding a single sheet of paper are:



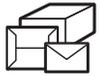
201.3.14.4

1. Bi-fold: folded once forming two panels.
 2. Tri-fold: folded twice forming three panels.
 3. Oblong: paper folded once to form two rectangular panels with one elongated dimension and parallel opposite sides. The final folded edge is on the leading (shorter) edge.
 4. Quarter-fold: folded twice with each fold at a right angle (perpendicular) to the preceding fold. One sheet of paper quarter-folded creates four panels.
- f. Flaps are formed when the final exterior panel is folded over and affixed to the unaddressed side of the mailpiece. Flaps must meet the following conditions:
1. The folded edge of a flap must be flush with the top edge of the mailpiece and end one inch or more above the bottom edge, except under [3.14.3f4](#). Flaps must be at least 1-1/2 inches when measured from the top of the mailpiece.
 2. Flaps must be secured by a sealing method in [3.14.4](#).
 3. Flaps with die-cut shapes must be firmly secured with tabs, glue line, glue spots or elongated glue lines. A 1/8 inch wide continuous glue line that seals the contour of the die-cut is strongly recommended.
 4. Flaps on oblong pieces must be at least 5 inches long at the longest point when measured from the leading edge and must end more than one inch from the trailing edge.
- g. Flaps and pockets prepared within folded self-mailers to stabilize enclosures are not considered to be panels.

3.14.4 General Sealing Methods

Folded self-mailers must be sealed using tabs or glue under the following conditions (also see [3.14.5](#) for specific sealing standards):

- a. Tabs must meet the standards for tabs in [3.11](#). The size and number of tabs required is determined by the weight of the mailpiece and optional design elements as follows:
1. To seal folded self-mailers that weigh up to 3 ounces created in bi-fold, tri-fold formats, pieces with multiple interior folds and a final fold on the bottom, and quarter-fold mailpieces that weigh up to one ounce; place two nonperforated tabs on the top edge, one within 1 inch from the leading edge and another within 1 inch from the trailing edge, or place one tab on the leading and another on the trailing edge, both placed within 1 inch from the top. Additionally, horizontal folded tri-fold and multi-fold pieces having the final folded panel as the addressed panel must include an additional 1-inch tab (1-1/2 inch preferred) for pieces weighing up to 1 ounce; or a 1-1/2 inch tab for pieces weighing over 1 ounce, placed 1/2 inch from the bottom of the leading edge. Instead of a tab, a 3/8-inch glue spot or 1/8-inch wide glue line placed 1/2 inch from the bottom and no more than 1/4 inch from the leading edge may be used. The glue spots or lines must be adhered from the addressed panel to the internal panel when the fold is completed.



2. To seal quarter-fold mailpieces made with newsprint that weigh more than 1 ounce up to 3 ounces, affix two tabs, one on the leading edge and one on the trailing edge within 1 inch from the top, and affix a third tab on the lower leading edge 1/2 inch from the bottom (see [3.14.5b](#)).
 3. To seal oblong pieces that weigh up to 3 ounces, affix one tab in the center of the top edge and one tab in the center of the trailing edge (preferred) or affix both tabs on the trailing edge within 1 inch of the top and bottom edges. Tabs may not be placed on the bottom of an oblong piece.
- b. Glue must be positioned within 1/4 inch of the open edges and be placed opposite the final fold or on both the leading and trailing edges when the final panel fold is on the bottom. Apply glue by one of the following methods:
1. Continuous glue lines at least 1/8 inch wide (0.125 inches).
 2. Three or four glue spots at least 3/8 inch (0.375 inch) in diameter.
 3. Three or four elongated glue lines. Seal folded self-mailers that weigh up to 1 ounce with lines at least 1/2 inch long. Seal folded self-mailers that weigh more than 1 ounce with elongated glue lines that are each at least 1 inch long and 1/8 inch wide, or with glue lines that are each at least 1/2 inch long and 1/4 inch wide.
 4. Distribute glue spots and elongated glue lines evenly along the sealed edge(s).
 5. Quarter-fold self-mailers must be sealed with tabs.

3.14.5 Paper Weight and Sealing Requirements

All references in [3.0](#) to paper basis weight are for book-grade paper unless otherwise stated (see [3.2](#)). Interior optional elements such as attachments or enclosures are not subject to the host piece's book-grade paper basis weight standards. When multiple optional design elements are incorporated in one mailpiece, the standards for the design element with the highest paper weight and corresponding sealing methods apply. Folded self-mailer paper weights and sealing methods are:

- a. Folded self-mailers, (except quarter-fold mailpieces) as described in [3.14.3e1](#) through [3.14.3e3](#):
 1. Up to 1 ounce: 70 pound paper sealed with a continuous glue line, three glue spots; or elongated glue lines under [3.14.4b](#); or two 1-inch tabs under [3.14.4a1](#) and [3.14.4a3](#).
 2. Over 1 ounce: 80 pound paper sealed with a continuous glue line, four glue spots; or four elongated glue lines under [3.14.4b](#); or two 1-1/2 inch tabs under [3.14.4a1](#) and [3.14.4a3](#).
- b. Quarter fold self-mailers as described in [3.14.3e4](#):
 1. Up to 1 ounce: 70 pound paper sealed with two 1-inch tabs.
 2. Over 1 ounce: 80-pound paper sealed with two 1-1/2-inch tabs.



Commercial Letters: Physical Standards for Letters and Cards

201.3.14.6

3. Newsprint: 55 pound minimum paper required. Seal pieces one ounce or less with two 1-1/2-inch tabs and those weighing over one ounce with three 1-1/2-inch tabs, see [3.14.4a2](#).
- c. Optional design elements: Die-cut openings and perforated panes. Folded self-mailers with die-cut openings in the exterior panels as described in [3.14.6](#) or perforated panes as described in [3.14.7](#) must meet the following:
 1. Up to 1 ounce: 100 pound paper sealed with glue under [3.14.4b](#), or two 1-1/2-inch tabs under [3.14.4a1](#) and [3.14.4a2](#).
 2. Over 1 ounce: 120 pound paper sealed with glue under [3.14.4b](#), or two 2-inch tabs under [3.14.4a1](#) and [3.14.4a2](#) or three 1-1/2-inch tabs under [3.14.4a3](#).
- d. Optional design elements: Loose enclosures or attachments. For folded self-mailers that have loose enclosures as described in [3.14.8](#) or attachments as described in [3.14.9](#), the following applies:
 1. Up to 1 ounce: 80 pound paper sealed with glue under [3.14.4b](#) or two 1-1/2-inch tabs under [3.14.4a1](#) and [3.14.4a2](#).
 2. Over 1 ounce: 100 pound paper sealed with glue under [3.14.4b](#), or two 2-inch tabs under [3.14.4a1](#) and [3.14.4a2](#) or three 1-1/2-inch tabs under [3.14.4a3](#).

3.14.6 Die-Cut Elements

Folded self-mailers may be produced with two types of die-cut elements in the exterior panels: address windows or die-cut reveal. Die-cut openings may not be used to create die-cut punched holes (openings in the same location on all layers and panels so that there is a hole through the entire mailpiece). Prepare die-cut elements as follows:

- a. Die-cut address windows (used to convey address information) must meet standards for window envelopes under [601.6.4](#) and meet the following additional conditions:
 1. The maximum window size is 4 inches long by 2 inches high.
 2. When an address window appears on a mailpiece, no other die-cut openings may be made on the exterior panels.
- b. Die-cut openings used to reveal the contents of the mailpiece must be:
 1. Limited to two on only one external panel.
 2. Either circular with a 2-inch maximum diameter or rectangular with a maximum of 2 inches long by 1-1/2 inches high with slightly rounded 1/4 inch radius corners.
 3. Placed at least 1-1/2 inches from all edges of the mailpiece if on the addressed side.
 4. Placed at least 5 inches from the leading edge and 1-1/2 inches from all other edges if on the non-addressed side.
 5. Positioned at least 1-1/2 inches apart when two or more die-cut openings are used.



- c. A single 1/2-inch semi-circular die-cut thumb notch may be placed on the trailing edge of the addressed or unaddressed outer panel.

3.14.7 Perforated Pull-Open Strips and Pop-Out Panes

Folded self-mailers may be prepared with strips called panes that are pulled open to reveal the contents. These design elements must be placed only on the unaddressed side of the mailpiece and may be rectangular, circular, or oval shaped. Perforations, a row of small holes punched in a sheet of paper so that a section can be torn easily, are used to create pull-open strips, pop-out, or pop-open panes subject to the following requirements:

- a. Two parallel perforated lines must be spaced at least 1/2 inch apart creating a pull open strip. Position perforated strips parallel to the height of the mailpiece at least 5 inches from the leading edge and 2 inches from the trailing edge. Position perforated strips parallel to the length of the mailpiece at least 1 inch from the top. Perforations have a 1mm cut (max)/1mm tie (min) ratio.
- b. Pop-out panes with perforations around the outer edges have a maximum size of 4 inches long by 4 inches high. The following conditions apply:
 - 1. Place panes at least 1 inch from any edge.
 - 2. Use 1mm cut (max)/1mm tie (min) ratio.
 - 3. When using two panes, space them at least 1 inch apart.
 - 4. Address elements may not appear in perforated openings.
- c. Pop-open panes with perforations on three sides must meet the following conditions:
 - 1. The outer edges of the pull-open panel are a maximum of 4 inches long by 4 inches high.
 - 2. If prepared with multiple panes, they must be spaced at least 1 inch apart.
 - 3. Panes must be placed at least 1 inch from all edges.
 - 4. Perforation patterns have 1 mm cut (max)/1 mm tie (min) ratio.
- d. Perforated panes may not be prepared on pieces with die-cuts or on any mailpiece made of newsprint.

3.14.8 Loose Enclosures

Folded self-mailers with loose enclosures must be securely sealed to ensure containment of the enclosed material and prevent excessive enclosure shift during processing. Loose enclosures must be made of paper and must meet the following conditions:

- a. Must be contained securely within the mailpiece.
- b. Must be inserted in an interior pocket or secured by any method that prevents excessive shift during normal handling. Pockets are not counted as panels.
- c. Folded self-mailers with die-cut openings may contain enclosures only if the inserted material is larger than the die-cut opening.
- d. Enclosed material does not exceed the maximum thickness of:



Commercial Letters: Physical Standards for Letters and Cards

201.3.14.9

1. 0.05 inch thick for mailpiece weights up to 1 ounce.
 2. 0.09 inch thick for mailpiece weights over 1 ounce.
- e. One empty reply envelope may be inserted within the first fold (manufacturing fold) of a quarter-folded self-mailer and must be secured within a fold to prevent separation during normal handling.

3.14.9 Attachments

Attachments must be secured on the outside of a folded self-mailer under [3.13](#). Attachments must be secured within a folded self-mailer under the following conditions:

- a. The attachment is affixed to an inside panel and secured to it at least 1/2 inch from any edge.
- b. The attached material may not exceed a maximum thickness of:
 1. 0.05 inch thick for mailpieces weighing up to 1 ounce.
 2. 0.09 inch thick for mailpieces weighing over 1 ounce.
- c. Multiple attachments must be positioned so that the host mailpiece remains nearly uniform in thickness.
- d. When multiple attachments are affixed to separate panels in stacked alignment, the combined thickness of the attachments must be no greater than the maximum thickness in [3.14.9b](#).
- e. When multiple attachments are affixed adjacent to each other across the length of a mailpiece, the thickest attachment must be no greater than the maximum thickness in [3.14.9b](#).
- f. Folded self-mailers with die-cut openings may contain attachments if the inserted material is larger than the die-cut opening.
- g. Quarter-fold self-mailers may have only one internal attachment not exceeding 0.012 inch thick. The attachment must be secured at least 1/2 inch from all edges.

3.14.10 Addressing

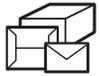
When folded self-mailers are prepared with uncoated paper, printing addresses in a center or left-justified position within the optical character reader (OCR) area under [2.1](#) is recommended.

3.15 Other Unenveloped Mailpieces

3.15.1 Open-Sleeve Style Letter-Size Mailpieces

Open-sleeve style letter-size mailpieces consists of two symmetrical horizontal panels sealed together along the top and bottom edges or as a bi-fold that has a non-addressed panel permanently sealed to an inner flap along the top edge. Open-sleeve style mailpieces must meet the following conditions:

- a. Join panels using 1/8 (0.125) inch continuous glue lines.
- b. If flaps are used, they must be a minimum of at least 1-1/2 inches wide created as inner flaps adhered at the leading and trailing edges to the panel from which the flap is formed.



- c. All paper basis weight requirements in [3.14.5d](#) must be met.
- d. Matter prepared within open-sleeve style mailpieces must meet the standards in [3.14.8](#) or [3.14.9b](#) through [3.14.9f](#).

3.15.2 Letter-Size Mailpieces with Tear-Off Strips

When letter-size mailpieces have tear-off strips on the leading and/or trailing edge, any unfolded edges must be sealed with an adhesive (glue) or by a cohesive (pressure seal) method. A cohesive seal requires two fixative patterns placed on two separate surfaces that are compressed to form a bond. A perforated horizontal line that runs between and joins the leading and trailing edge perforation lines is permitted. Mailpieces with sealed sides must meet the following conditions.

- a. Be constructed of a minimum of 60 pound paper.
- b. Tear-off strips may be up to 9/16 inch (0.5625) wide.
- c. Tear lines (single lines of perforations) on pieces that weigh 1 ounce or less; recommended minimum cut/tie pattern of 1mm cut (max)/1mm tie (min) ratio or equivalent.
- d. Tear lines (single lines of perforations) on pieces that weigh more than 1 ounce; minimum cut/tie pattern of 1mm cut /2mm tie (min) ratio or equivalent.

3.16 Booklets

3.16.1 Definition

Booklets must have a bound edge (spine.) Sheets that are fastened with at least two staples in the manufacturing fold (saddle stitched), perfect bound, pressed-glued, or joined together by another binding method that produces a spine where pages are attached together are considered booklets. Booklets are open on three sides before sealing, similar in design to a book. In general, booklets must be uniformly thick. Large bound booklets that are folded for mailing may qualify for automation and machinable prices if the final mailpiece remains nearly uniform in thickness and conforms to all other automation standards.

3.16.2 Paper

Booklet covers generally must be made with a minimum paper basis weight of 60-pounds or equivalent. Minimum basis weights are higher for some designs (see [3.16.4](#)).

3.16.3 Physical Standards for Booklets

Booklets must be:

- a. Height: not more than 6 inches or less than 3.5 inches high.
- b. Length: not more than 10.5 inches or less than 5 inches long. See [Exhibit 3.16.5](#) through [Exhibit 3.16.8](#) for some booklet designs with shorter maximum lengths.
- c. Thickness: not more than 0.25 inch or less than 0.009 inch thick.
- d. Weight: not more than 3 ounces.
- e. Aspect ratio: within 1.3 to 2.5 (see [3.7](#)).



201.3.16.4

3.16.4 General Booklet Design and Sealing

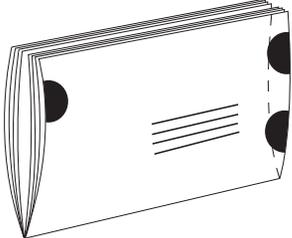
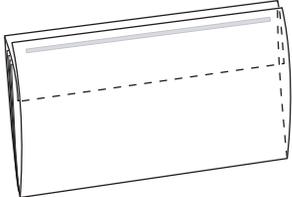
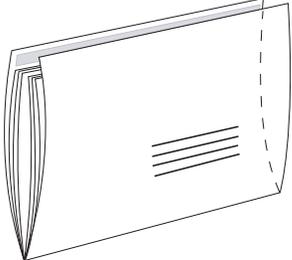
The position of the final fold and intermediate fold (or spine) for letter-sized booklets varies according to the specific design of the mailpiece. Open edges can be sealed with tabs, cellophane tape, glue lines, or glue spots. Except for the simple spine wallet-style design with a height of 4 inches and a maximum length of 8 inches; tabs used as seals on the leading edge of small booklets less than 5 inches high, may be placed closer to the top and bottom edges than shown in [Exhibit 3.16.5](#) through [Exhibit 3.16.8](#) and may overlap in some cases. See [Exhibit 3.16.5](#) through [Exhibit 3.16.8](#) for design and sealing standards by type of design.



3.16.5 Simple Spine

The spine forms the bottom edge of the mailpiece. The length or method used to seal the booklet determines the weight of the paper forming the cover.

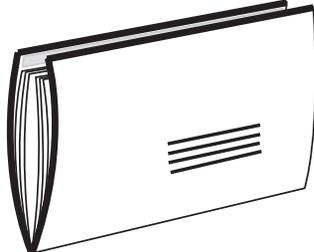
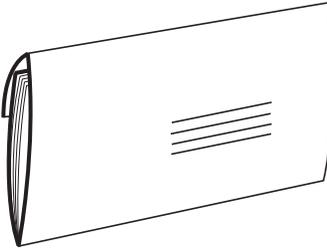
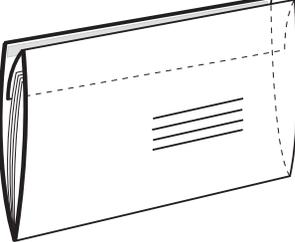
Exhibit 3.16.5 Simple Spine Booklets

<p>SIMPLE SPINE BOOKLETS Maximum weight—3 ounces Maximum height—6 inches Maximum length—9.5 inches unless noted Cover paper weight—80-pound paper unless noted: see Exhibit 3.2</p>	
<p>Basic</p> 	<p>Cover: 5" to 9" long at least 50-pound paper Over 9" up to 10.5" at least 60-pound paper The front cover may be up to a maximum of 0.25" shorter than pages and rear cover. Nonperforated 1.5" tabs. Place one tab on the leading and trailing edges within 1" from the top; position one tab on the lower leading edge 0.5" from the bottom.</p>
<p>Internal Flap</p> 	<p>Cover: Minimum 80-pound paper</p> <p>Extended front folded over enclosed pages to create a nonperforated inner flap. Flap sealed inside of back cover.</p> <p>Seal with a continuous glue line along flap as described in 3.11g (preferred), or 1-inch glue spots as described in 3.11f.</p>
<p>Cover-to-Cover</p> 	<p>Cover: Minimum 80-pound paper</p> <p>Cover extends no more than 5/8 inch beyond inner pages.</p> <p>Seal with a continuous glue line along extended cover as described in 3.11g (preferred), or with 1-inch glue spots as described in 3.11f.</p>



Commercial Letters: Physical Standards for Letters and Cards

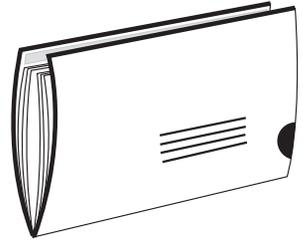
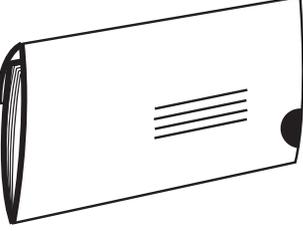
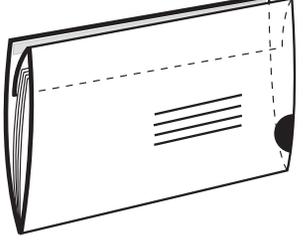
201.3.16.5

LIGHTWEIGHT SIMPLE SPINE BOOKLETS Maximum weight—0.8 ounce Maximum height—6 inches Maximum length—10.5 inches Cover paper weight—70-pound paper unless noted: see Exhibit 3.2	
<p>Cover-to-Cover</p> 	<p>Cover extends no more than 5/8 inch beyond inner pages.</p> <p>Seal with a continuous glue line as described in 3.11h.</p>
<p>External Flap</p> 	<p>Addressed side of the cover extends over all pages on the back to create a flap.</p> <p>Flap length: at least 1.5" wide when measured down from the top edge. May be longer, but cannot be closer than 1-inch from bottom edge.</p> <p>Flap attaches to the outside of the nonaddressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h.</p>
<p>Internal Flap</p> 	<p>Addressed side of the cover extends over internal pages to create an inside flap.</p> <p>Flap length: at least 1.5" wide when measured down from the top edge.</p> <p>Flap attaches to the inside of the nonaddressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h.</p>



Commercial Letters: Physical Standards for Letters and Cards

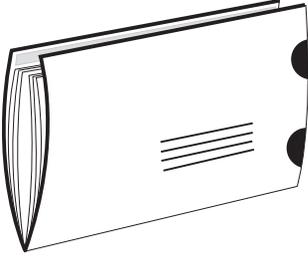
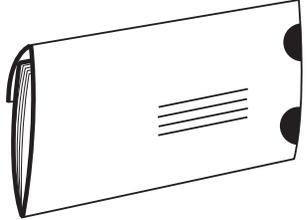
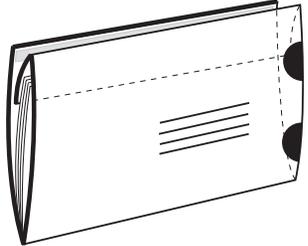
201.3.16.5

MID-WEIGHT SIMPLE SPINE BOOKLETS Weight—over 0.8 ounce up to 1.6 ounces Maximum height—6 inches Maximum length—10.5 inches Cover paper weight—70-pound paper unless noted: see Exhibit 3.2	
<p>Cover-to-Cover</p> 	<p>Cover extends no more than 5/8 inch beyond inner pages.</p> <p>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches.</p>
<p>External Flap</p> 	<p>Addressed side of the cover extends over all pages on the back to create a flap.</p> <p>Flap length: at least 1.5" wide when measured down from the top edge. May be longer, but cannot be closer than 1-inch from bottom edge.</p> <p>Flap attaches to the outside of the nonaddressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches.</p>
<p>Internal Flap</p> 	<p>Addressed side of the cover extends over internal pages to create a flap.</p> <p>Flap length: at least 1.5" wide when measured down from the top edge.</p> <p>Flap attaches to the inside of the non-addressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h, and one nonperforated tab 0.5 inch from the bottom leading edge. Minimum tab size: 1.5 inches.</p>



Commercial Letters: Physical Standards for Letters and Cards

201.3.16.5

<p>HEAVY WEIGHT SIMPLE SPINE BOOKLETS Weight—over 1.6 ounces up to 3 ounces Maximum height—6 inches Maximum length—10.5 inches Cover paper weight—70-pound paper unless otherwise noted: see Exhibit 3.2</p>	
<p>Cover-to-Cover</p> 	<p>Cover extends no more than 5/8 inch beyond inner pages.</p> <p>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge.</p>
<p>External Flap</p> 	<p>Addressed side of the cover extends over all pages on the back to create a flap.</p> <p>Flap length: at least 1.5" wide when measured down from the top edge. May be longer, but cannot be closer than 1 inch from bottom edge.</p> <p>Flap attaches to the outside of the nonaddressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge.</p>
<p>Internal Flap</p> 	<p>Addressed side of the cover extends over internal pages to create a flap.</p> <p>Minimum flap length: at least 1.5" wide when measured down from the top edge.</p> <p>Flap attaches to the inside of the non-addressed side of the cover.</p> <p>Seal with a continuous glue line as described in 3.11h and two 1.5" nonperforated tabs. One tab placed on the leading edge 0.5 inches from bottom and one tab placed 1-inch from top leading edge.</p>



3.16.6 Wallet Style Booklets

A spine forms the bottom edge. Wallet style booklets must be from 5.2 inches to 8 inches long, 4 inches high; can weigh up to 2.5 ounces; and must be sealed with nonperforated tabs. Tab size and placement are dictated by the weight of the booklet.

Exhibit 3.16.6 Wallet Style Booklets

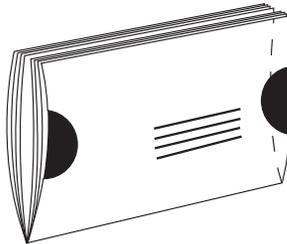
WALLET STYLE BOOKLETS

Maximum weight—2.5 ounces

Height—4 inches

Maximum length—5.2 to 8 inches

Cover paper weight—70-pound paper unless otherwise noted: see [Exhibit 3.2](#)



Cover:

Entire booklet 60-pound paper, **OR**

Cover 70-pound paper, inner pages 50-pound paper.

Booklets up to 2 ounces: sealed with 1.5" nonperforated tabs placed 1-1/4" from bottom leading and trailing edge.

Over 2 ounces: use 2" nonperforated tabs placed 3/4" from bottom leading and trailing edge.

±1/8" vertical tolerance for tab placement in both cases.



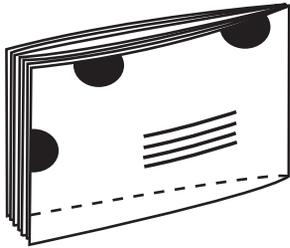
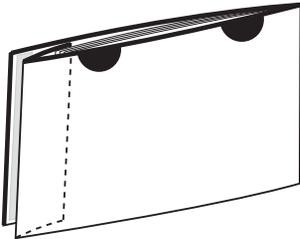
Commercial Letters: Physical Standards for Letters and Cards

201.3.16.7

3.16.7 Oblong Booklets

Oblong booklets have a spine on the leading (shorter) edge.

Exhibit 3.16.7 Oblong Booklets

OBLONG BOOKLETS Maximum weight—3 ounces Maximum height—6 inches Maximum length—10.5 inches Cover paper weight—70-pound paper unless otherwise noted: see Exhibit 3.2	
<p>All Tab</p> 	<p>Cover: 5" to 9" long: 60-pound paper Over 9" up to 10.5": 70-pound paper</p> <p>Place two 1.5" nonperforated tabs on the top edge and one tab on trailing edge. Position top tabs 1-inch from left and right edges. Position one 1.5" nonperforated tab in the middle of the trailing edge.</p>
<p>Internal Flap</p> 	<p>Cover: 5" to 9" long 60-pound paper Over 9" up to 10.5" 70-pound paper</p> <p>The front OR back cover sheet is extended on the trailing edge and folded over the non-recessed internal pages. The flap is sealed inside the opposite cover sheet with glue. Extended front and back covers are not allowed with glue line seals.</p> <p>Seal with a continuous glue line as described in 3.11h. Place two 1.5" nonperforated tabs on the top edge 1-inch from the leading and trailing edges.</p>



201.3.18.2

3.18.2 Courtesy Reply Mail

Courtesy reply mail (CRM) is reply mail other than BRM or MRM enclosed in other mail, with or without prepayment of postage, for return to the address on the reply piece. If postage is required, the customer returning the piece affixes the applicable First-Class Mail postage. Each piece must meet the physical standards in [1.0](#) or [2.0](#).

4501-27-07 Specifications for validation stickers.

(A) Specifications for the manufacture of validation stickers required for the annual registration of passenger, commercial, motorcycle, and other vehicles are presented herein. There shall be a single validation sticker showing the month and year that the current registration period expires. One sticker shall be issued for each vehicle. The validation sticker shall be made of weather-resistant reflective sheeting having a smooth flat outer surface consisting of lens elements enclosed within a transparent plastic. The sheeting shall have pre-coated pressure-sensitive adhesive on the back side, protected by a removable liner, for convenient and durable attachment to the license plate or upon a previously applied sticker.

(B) The reflective sheeting shall be free from ragged edges, cracks and blisters, and shall be readily cut without cracking or flaking. All sheets shall be free of foreign matter.

(C) The pre-coated adhesive on all stickers shall be of a pressure-sensitive type which shall permit the sticker to be applied to the surface of the license plate or upon a previously applied validation sticker while license plates are attached to the vehicles. The use of additional adhesive coats, water solvents, or heat techniques to apply the sticker shall not be required. The adhesive shall have no staining effect on the reflective material and shall permit application of the sticker to the license plate or previously applied sticker at temperatures of minus ten degrees Fahrenheit or warmer. The adhesive shall withstand drying oven temperatures of one hundred fifty degrees Fahrenheit to at least three hundred fifty degrees Fahrenheit without melting or running and shall not exude from edges of sheeting to cause stacked sheets or processed stickers to stick together during manufacture and distribution.

(D) The validation sticker shall be manufactured in a manner that insures that it shall not become brittle, flaky, discolored, or acquire a powdery surface for a period of at least five years and that permits the stacking of at least five stickers.

(E) The adhesive protective liner may have a scalloped scoreline or a straight scoreline at or near the center of each sticker for easy removal.

(F) The validation sticker under normal service use shall adhere to the surface of the license plate and, when stacked up to five stickers high, shall adhere to the sticker to which it is applied for a minimum of five years and shall not be removable intact.

(G) The director of public safety shall designate the design of the validation sticker. The sticker design for each month of each registration year shall be the same except for the applicable monthly code numbers one to twelve. The first code number shown on the sticker shall identify the month of expiration and the second series of numbers shall identify the last two digits of the year of expiration.

(H) Stickers applied in accordance with instructions shall not blister, lift, or delaminate when subjected to gasoline, kerosene, diesel oils, water, steam, and cleaning detergents normally encountered in cleaning and washing service, nor shall stickers fade, disintegrate, or come off from extended exposure within a period of five years.

(I) The dimensions of each validation sticker shall be approximately one and one-half inches in width and one inch in height.

(J) The director shall designate the colors of the validation stickers on an annual basis.

(K) The validation stickers may be produced by Ohio penal industries or on-site at the registrar's offices or at deputy registrar or limited authority deputy registrar agencies, as authorized by the registrar. Validation stickers produced on-site at the registrar's offices or at deputy registrar or limited authority deputy registrar agencies shall be produced by a "print on demand" process, whereby the registration expiration month and year shall be printed on the validation sticker as each validation sticker is issued.

Effective: 10/22/2011

R.C. [119.032](#) review dates: 06/14/2011 and 03/10/2016

Promulgated Under: [119.03](#)

Statutory Authority: R.C. [4503.191](#) , R.C. [4503.22](#)

Rule Amplifies: R.C. [4503.191](#) , R.C. [4503.22](#)

Prior Effective Dates: 2/13/81, 8/13/84, 2/9/87, 12/23/88 (Emer.), 4/9/89, 6/13/96, 4/27/06