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Intelligent Mail® Barcodes

Agenda

- **Intelligent Mail® Implementation**
- Intelligent Mail Barcode for Mailpieces
- Intelligent Mail Tray Barcode and Label for Trays and Sacks
- Intelligent Mail Container Barcode and Placard for Containers

Intelligent Mail® Implementation

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- Requirements for Basic Option
  - Intelligent Mail barcodes on letter- and flat-size mailpieces
- Requirements for Full-Service Option
  - *Unique* Intelligent Mail barcodes on letter- and flat-size mailpieces
  - *Unique* Intelligent Mail tray barcodes on tray and sack Intelligent Mail tray labels
  - *Unique* Intelligent Mail container barcodes on Intelligent Mail container placards
  - Electronic documentation
  - Appointment scheduling using FAST® (when required)

Agenda

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- Intelligent Mail® Implementation
- **Intelligent Mail Barcode for Mailpieces**
- Intelligent Mail Tray Barcode and Label for Trays and Sacks
- Intelligent Mail Container Barcode and Placard for Containers

Intelligent Mail® Barcode for Mailpieces

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- Placement
- Content
- Specifications
- Tools and Resources

Intelligent Mail® Barcode Placement

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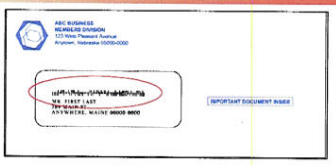

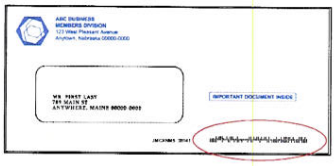

- Placement on letters
  - Address block or
  - Barcode clear zone
- Placement on flats
  - On address side and
  - At least 1/8 inch from any edge of the piece
- Placement configurations of the IM™ barcode on a letter-size and flat-size mail are defined in the Domestic Mail Manual (DMM™).

Intelligent Mail® Barcode Content

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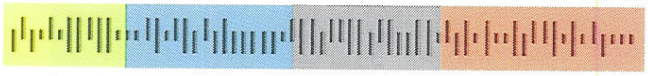

- Difference between Basic and Full-Service
  - Different Service Type Codes
  - Uniqueness for 45 days based on
    - Mailer ID
    - Serial Number

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

Remember: The POSTNET™ contains *only* Delivery Point information

Intelligent Mail® Barcode Data Construct

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- A 2-digit field that corresponds to the type of barcode
- For flat-size mail, it designates the Optional Endorsement Line (OEL)

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

Intelligent Mail® Barcode Data Construct

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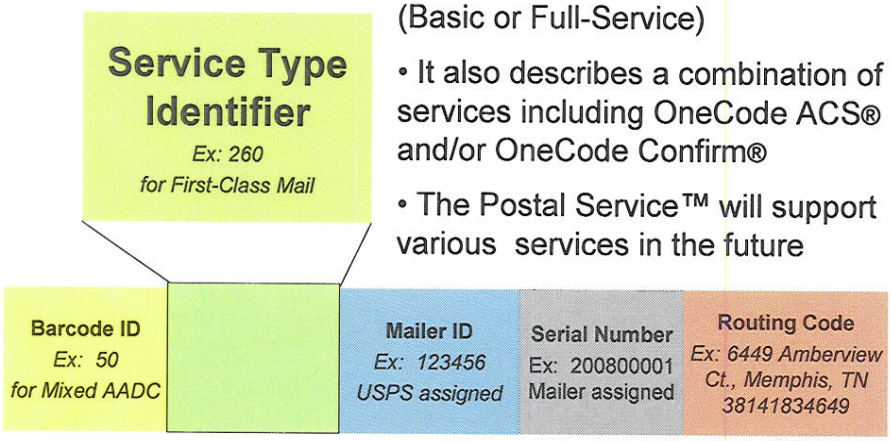
- A 3-digit field that corresponds to the mail class and the service level (Basic or Full-Service)
- It also describes a combination of services including OneCode ACS® and/or OneCode Confirm®
- The Postal Service™ will support various services in the future



Intelligent Mail® Barcode Service Type IDs

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- One mailing may have any combination of Full-Service, Basic, and non-auto
  - Non-auto is similar to Basic Service

First-Class Mail—Commercial Letters & Cards

Weight Not Over (ounces)	Automation				Nonautomation
	5-Digit	3-Digit	AADC	Mixed AADC	Presorted[1]
1 2 3 3.5	**Basic Option Codes** **Full-Service Option Codes**				**Non-auto Codes**
Postcard[3]					

IM™ Barcode Content Service Type Codes

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If you are requesting OneCode ACS® and/or OneCode Confirm®, the Service Type Codes become more complex.

Class	Address Correction Option	Basic w/o Confirm	Basic w/Confirm	Full w/o Confirm	Full w/ Confirm	Non-Auto w/o Confirm	Non-Auto w/ Confirm
First-Class Mail	No Address Corrections	300	310	260	270	700	310
	Manual Corrections	700	040	036	041	700	040
	Traditional ACS	080, 082	140, 240	081, 083	141, 241	080, 082	140, 240
	OneCode ACS – ASR	080	140	081	141	080	140
	OneCode ACS – ASR Option 2	080	140	081	141	080	140
	OneCode ACS – CSR	082	240	083	241	082	240
	OneCode ACS – CSR Option 2	082	240	083	241	082	240
Standard	No Address Corrections	301	311	261	271	702	311
	Manual Corrections	702	042	037	043	702	042
	Traditional ACS	090, 092	142, 242	091, 093	143, 243	090, 092	142, 242
	OneCode ACS – ASR	090	142	091	143	090	142
	OneCode ACS – CSR	092	242	093	243	092	242

Intelligent Mail® Barcode Data Construct

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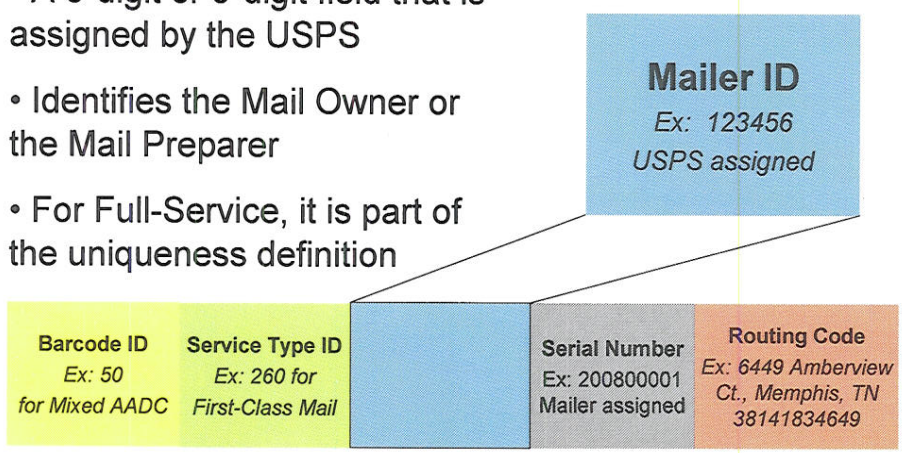
- A 6-digit or 9-digit field that is assigned by the USPS
- Identifies the Mail Owner or the Mail Preparer
- For Full-Service, it is part of the uniqueness definition



Intelligent Mail® Barcode Data Construct

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- A 6 or 9-digit field that is defined by the mailer
- For Basic Service it can be static
- For Full-Service it must be variable is part of the uniqueness qualification
  - May be sequential or non-sequential

Serial Number
Ex: 200800001
Mailer assigned

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

Non-Sequential Serial Numbers

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- Serial Numbers are not sequentially numbered
- May be related to a database matching system

Barcode ID *50*
Service Type *260*
Mailer ID *123456*
Routing Code *38141834649*

5026012345620080000138141834649 — 200800001
5026012345620080000738141834653 — 200800007
5026012345620080000238141834657 — 200800002

Any Unassigned Serial Number
Mailer Assigned
Ex: **200800008**

Sequential Serial Numbers

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- Serial Numbers are sequential and consecutive

Barcode ID *50*
Service Type *260*
Mailer ID *123456*
Routing Code *38141834649*

50260123456200800001 38141834649
50260123456200800002 38141834653
50260123456200800003 38141834657

200800001
200800002
200800003

Next Unassigned Serial Counter
Mailer Assigned
Ex: **200800004**

Intelligent Mail® Barcode Data Construct

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- 11-digit field that corresponds to the Delivery Point Barcode – currently the POSTNET™ barcode.
- Non-automation may have 9 or 5 digits or no data in this field

Routing Code
Ex: 6449 Amberview Ct., Memphis, TN 38141834649

Barcode ID	Service Type ID	Mailer ID	Serial Number	
Ex: 50 for Mixed AADC	*Ex: 260 for First-Class Mail*	*Ex: 123456 USPS assigned*	Ex: 200800001 Mailer assigned	

IM™ Barcode - Where does the Data Come From?

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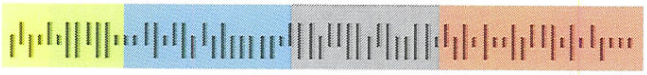

Barcode ID	Software
Service Type	Mailer, modified by software
Mailer ID	Mailer or Mail Preparer
Serial Number	Mailer or Mail Preparer
Routing Code	CASS™/DPV®/LACSLink®, modified by software

Determines Uniqueness

Intelligent Mail® Barcode Specifications

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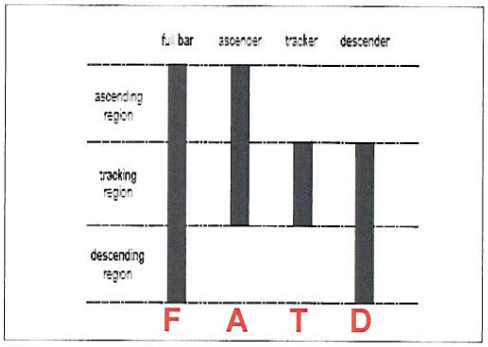
- For letters and flats
- Height-modulated barcode
- Uses 4-state symbology
- Full bar, Ascender, Tracker, and Descender



Intelligent Mail® Barcode Specifications

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	11-digit POSTNET™	13-digit PLANET Code®	Intelligent Mail® Barcode
Number of Bars	62	72	65
Bar Width	0.020 ± 0.005 inch	0.020 ± 0.005 inch	0.020 ± 0.005 inch
Horizontal Pitch	22 ± 2 bars per inch	22 ± 2 bars per inch	22 ± 2 bars per inch
Height of Full Bar	0.125 ± 0.010 inch	0.125 ± 0.010 inch	0.145 ± 0.020 inch
Vertical Barcode Clearance	Min: 0.040 inch Max: 0.625 inch	Min: 0.040 inch Max: 0.625 inch	Min: 0.028 inch Max: 0.625 inch
Voids	Max: 0.005 inch	Max: 0.005 inch	Max: 0.010 inch

IM™ Barcode Specifications Bar Parameters

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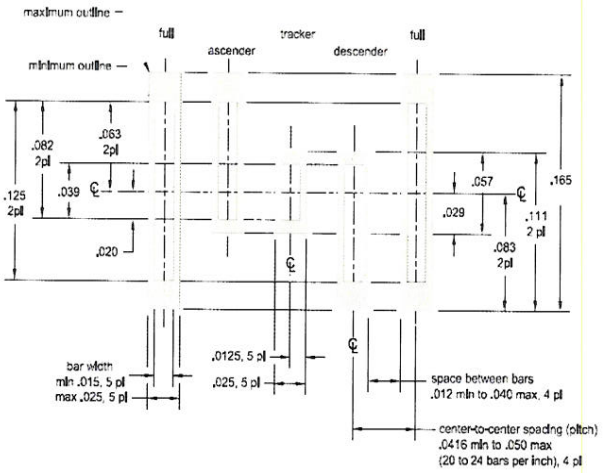

IM™ Barcode Specifications Clearance/Voids

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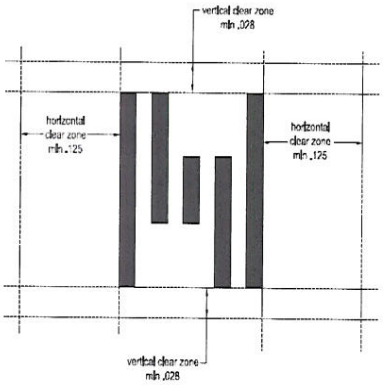
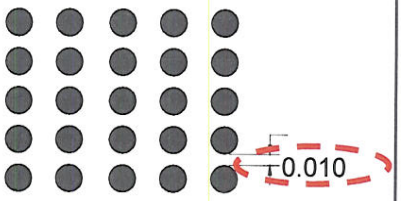


- A minimum clear zone of 0.125 inch between the left and right edges of the barcode is required.
- A minimum clear zone of 0.028 inch above and below the barcode is required.

- Maximum dot matrix spacing must not exceed 0.010 inch.



Intelligent Mail® Barcode

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- There are three steps required to generate the Intelligent Mail barcode on mailpieces:
  - Form the 31-digit payload
  - Encode the 31-digits
  - Print the barcode on mailpieces

Encoding Differences

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- POSTNET™ and PLANET Code®
  - Image-based fonts
  - Do not require encoding algorithms
    - POSTNET Example: 53594 = 53594
    - Visually determine the information….(74210)
- Intelligent Mail® barcode requires an encoding algorithm
  - Bar-for-bar image
  - Requires conversion with algorithms

Intelligent Mail® barcode example: 00700123456200800001987654321 01

DADTATFFAFFTTTAFTAFDADFDDDDDTAFFDAAFFDAFDDFFTADFTFTTFDAAFTFTADTTT

Form the 31-digit Payload

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- Data for the 31-digits in the barcode needs to be gathered and assembled
- Ex: 5026012345620080000138141834649

Barcode ID	Service Type	Mailer ID	Serial Number	Routing Code
Ex. 50	*Ex. 260 for*	*Ex. 123456*	Ex: 200800001	*Ex. 38141834649*
for Mixed AADC	*First-Class Mail*	*USPS assigned*	Mailer Assigned	

Encode the Barcode

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- Next, encoding software is used to transform the 31-digits into the barcode payload

5070012345620080000138141834649

Apply Encoding Algorithm

DADTATFFAFFTTTAFTAFDADFDDDDDTAFFDAAFFDAFDDFFTADFTFTTFDAAFTFTADTTT

To download encoders and user guides visit:
http://ribbs.usps.gov/OneCodeSolution/

Print

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- Then, simply apply the USPS-developed font to the encoded string, and PRINT

DADTATFFAFFTTTAFTAFDADFDDDDDTAFFDAAFFDAFDDFFTADFTFTTFDAAFTFTADTTT

USPS® Developed Font

Print Intelligent Mail® barcode

Tools and Resources

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- Manual Tools
  - Visual Inspection
  - Plastic Templates
  - Optical Comparator
- Software Tools
  - Online Encoder/Decoder
  - Scanners and Verifiers

- Contact your Mailpiece Design Analyst (MDA)
- To generate Intelligent Mail® barcodes review specification USPS-B-3200 available on RIBBS™

Tools and Resources

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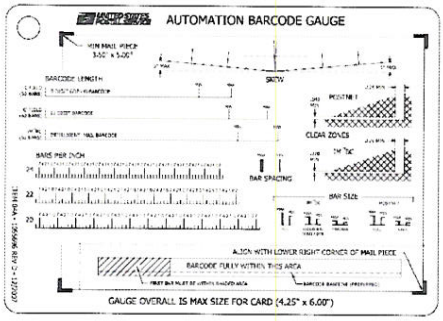
- Automation Barcode Gauge Template (Item #04A)
- Great tool available from your local Business Service Network or Mailpiece Design Analyst
- Measures both the Intelligent Mail® barcode and the POSTNET™



Tools and Resources

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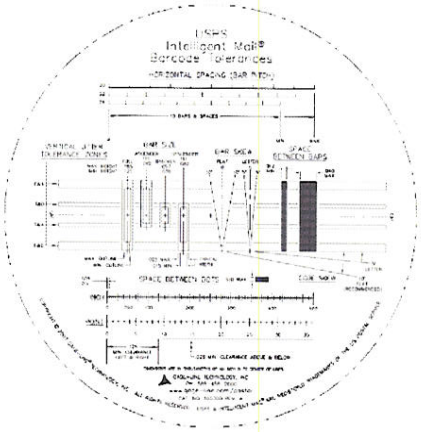
- Optical Comparator 6X (Eye Gauge) by Gage-Line Technology
- Complements Item 04A with ability to measure exact heights/widths and to assess barcode jitter (~centerline shift).



Tools and Resources

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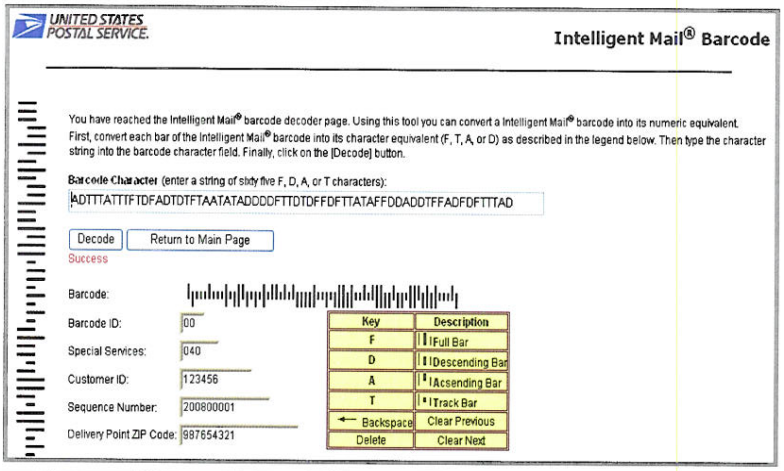
Basic online decoder tool is available at:
http://ribbs.usps.com/OneCodeSolution



Tools and Resources

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- The Culver Group
  - HHP4600 Area Imager
- Videk
  - VisionSensor 2030 and POSTNET™ Verifier
- BCC Software (A Böwe Bell+Howell Company)
  - Mail Verifier Plus (MVP)
- Motorola/Symbol
  - Scanners – DS3408, DS3478 and DS6707
  - Mobile computers – MC50, MC70, MC3000, MC9000
- Others
  - http://ribbs.usps.gov/OneCodeSolution/

Agenda

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- Intelligent Mail® Implementation
- Intelligent Mail Barcode for Mailpieces
- **Intelligent Mail Tray Barcode and Label for Trays and Sacks**
- Intelligent Mail Container Barcode and Placard for Containers

Intelligent Mail® Barcode Full-Service Option

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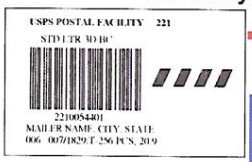
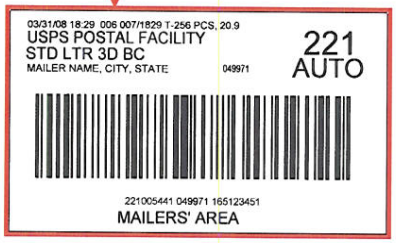
Unique Intelligent Mail Tray Barcodes
on Tray and Sack Intelligent Mail Tray Labels



Existing Legacy Label

Transitional10/24-digit Intelligent Mail® Tray Label



24-digit Intelligent Mail® Tray Label
April 2009

Intelligent Mail® Barcode Full-Service Option

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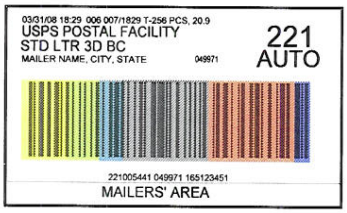
Unique Intelligent Mail Tray Barcodes
on Tray and Sack Intelligent Mail Tray Labels



ZIP Code®	Content Identification Number (CIN)	Processing Code	Mailer ID	Serial Number	Label Type
Ex: Memphis, TN 38141	*3-digits describing the tray*	*Ex: 1 for Automation Compatible*	*Ex: 123456 USPS Assigned*	*Ex: 20080001 Mailer Assigned*	*Ex: 1 For 6-digit MID*

The former tray barcode only contained routing information. The 24-digit Intelligent Mail® tray label cannot be used until April 2009.

Generating IM™ Tray Labels

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For Intelligent Mail® tray labels:

- You will need:
  - USPS-assigned Mailer ID (MID)
  - Content Identification Number (CIN) List available on http://pe.usps.com/
  - Software to generate Code 128 subset C for the Intelligent Mail® tray barcode
- Review specifications USPS-L-3191 and USPS-L-3216 available on http://ribbs.usps.gov/

Intelligent Mail® Tray Label Certification

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- The USPS® has implemented a voluntary certification process for the Intelligent Mail Tray label.
  - The use of certified labels is recommended by the USPS.
  - Vendors will be certified as Basic or Full-Service. Full-Service Option will meet the needs of both.
  - The vendors will submit samples to the National Customer Support Center (NCSC).
  - All information must be submitted for each operational configuration.

Intelligent Mail® Tray Label Certification

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Benefits of Certification

- Vendors receive PS Form 3114 as documentation for successfully completing certification
- A list of certified vendors will be maintained on RIBBS™
- Customers looking for a certified software vendor will be directed to the RIBBS website

UNITED STATES POSTAL SERVICE.

National Customer Support Center

RIBBS™ Intelligent Mail & Address Quality

Agenda

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UNITED STATES POSTAL SERVICE.

- Intelligent Mail® Implementation
- Intelligent Mail Barcode for Mailpieces
- Intelligent Mail Tray Barcode and Label for Trays and Sacks
- **Intelligent Mail Container Barcode and Placard for Containers**

Intelligent Mail® Barcode Full-Service Option

INTELLIGENT MAIL® University

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Unique Intelligent Mail Container Barcodes on Intelligent Mail Container Placards

- Two configurations:

1. Minimum 8" high x 11" long
   - Top ½ must be retained for USPS-required elements
   - Bottom ½ may be used by customer
   - Placards must be affixed to two adjacent sides on the outside of the shrinkwrap or container as of November 2009

Intelligent Mail® Barcode Full-Service Option

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UNITED STATES POSTAL SERVICE.

Unique Intelligent Mail Container Barcodes on Intelligent Mail Container Placards

- Two configurations:
  2. Minimum 4" high x 7" long
     - USPS-required elements
     - Restricted Mailer / Acceptance Unit Area:
       - Bottom line of the placard
       - No larger than 12-point font
     - Placards must be affixed to two adjacent sides on the outside of the shrinkwrap or container as of November 2009

Intelligent Mail® Barcode Full-Service Option

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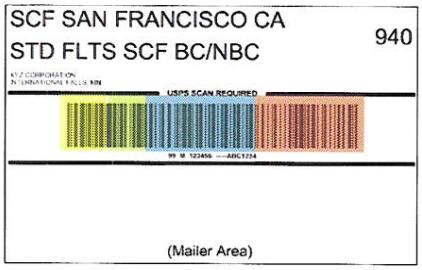
Unique Intelligent Mail Container Barcodes on Intelligent Mail Container Placards



Application Identifier	Type Indicator	Mailer ID	Serial Number
99	*M*	*Ex: 123456* *USPS Assigned*	*Mailer Assigned, Ex: 200800000001*

The former container placard did not contain a barcode

Generating IM™ Container Barcode and Placard

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- Talk with your vendor about generating the placard and barcode
- For the latest Intelligent Mail® container barcode specifications go to http://ribbs.usps.gov/ and reference USPS-B-3215
- Use the Domestic Mail Manual as a resource
- Consider working with vendors

UNITED STATES POSTAL SERVICE
National Customer Support Center
RIBBS™ Intelligent Mail & Address Quality

Software Vendors and Service Providers

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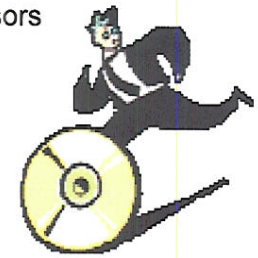
- Talk with Software Vendors to find out what will be available in future software releases for you to use
- Talk with your service providers to discuss what they will provide for you
  - List Brokers and Agents
  - Service Bureaus and Data Processors
  - Printers
  - Lettershops
  - Mail Preparation
  - Consolidators, comminglers
  - Logistics



Additional Resources

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- **Domestic Mail Manual**
- **www.ribbs.usps.gov**
- **Federal Register Notice: Implementation of New Standards for Intelligent Mail® Barcodes**
- **A Beginners Overview to Intelligent Mail Services**
- **A Guide to Intelligent Mail for Letters and Flats**
- **Electronic Documentation and Intelligent Mail: Ready, Set, Go!**
- **Technical Help for Barcodes**
  - Specifications USPS-B-3200; USPS-L-3191 and USPS-L-3216; USPS-B-3215
- **Technical Guide for Electronic Documentation**
  - *PostalOne!®* Mail.dat Technical Guide
  - *PostalOne!* Mail.XML Technical Guide

Resources & Information

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- Contact your local Business Mail Entry Unit or Mailpiece Design Analyst:
  - District Business Mail Entry Locator
    http://www.usps.com/ncsc/locators/find-bme.html
  - Mailpiece Design Analyst Locator
    http://pe.usps.gov/mpdesign/mpdfr_mda_lookup.asp
- Contact the Help Desk: 1-800-522-9085
- *PostalOne!*® information http://usps.com/postalone/