

401 Physical Standards

Overview

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1.0 Physical Standards for Parcels

1.1 Parcels

Each parcel is assigned to one of three mail processing categories: machinable, irregular, or outside parcel. These categories are based on the physical dimensions of the piece, regardless of the placement (orientation) of the delivery address on the piece. [C050.1.0]

1.2 Minimum Size

Pieces are subject to the minimum standards in [601.1.0, General Standards](#), and may be subject to other minimum dimensions, based on the standards for specific rates. [C100.1.2]

1.3 Maximum Weight and Size

No mailpiece may weigh more than 70 pounds. Lower weight limits apply to First-Class Mail, Standard Mail, and Bound Printed Matter. Pieces may not measure more than 108 inches in length and girth combined, except Parcel Post, which may not measure more than 130 inches in length and girth combined. For parcels, length is the distance of the longest dimension and girth is the distance around the thickest part. Lower size or weight standards apply to mail addressed to some APOs and FPOs subject to [703.2.0](#) and [703.4.0](#) and for Department of State mail, subject to [703.3.0](#). [C010.1.2]

1.4 Two or More Packages

Two or more packages may be mailed as a single parcel, if they are about the same size or shape or if they are parts of one article, if they are securely wrapped or fastened together, and if they do not together exceed the weight or size limits. [C100.1.3]

1.5 Machinable Parcels

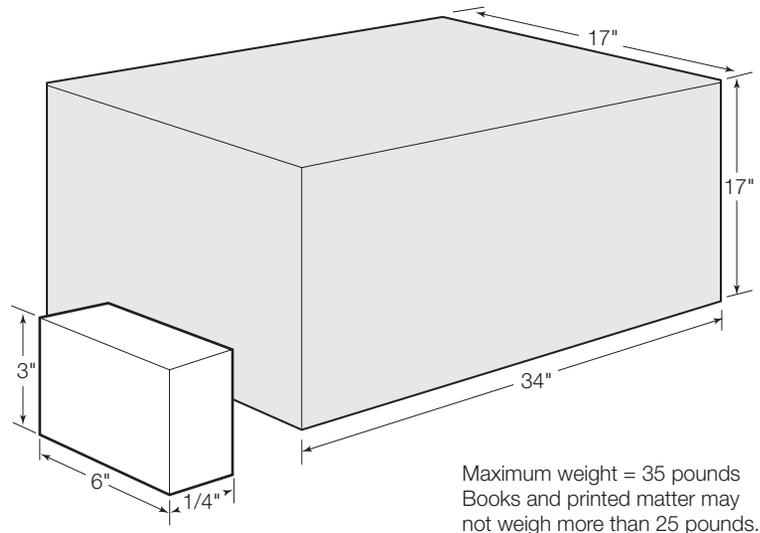
1.5.1 Criteria

A machinable parcel is any piece that is (see [Exhibit 1.5.1, Machinable Parcel Dimensions](#)):

- a. Not less than 6 inches long, 3 inches high, 1/4 inch thick, and 6 ounces in weight. (A mailpiece exactly 1/4 inch thick is subject to the 3 1/2-inch height minimum under [601.1.0](#).)
- b. Not more than 34 inches long, or 17 inches high, or 17 inches thick, or 35 pounds in weight. For books or other printed matter, the maximum weight is 25 pounds. [C050.4.1]



Exhibit 1.5.1 Machinable Parcel Dimensions



Minimum weight = 6 oz.
(for details, see machinable parcel criteria in 401.1.5.1)

[Exhibit C050.1.0]

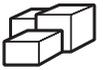
1.5.2 Soft Goods and Enveloped Printed Matter

Soft goods wrapped in paper or plastic bags and enveloped printed matter are machinable only if all packaging standards in [601.1.0, General Standards](#), are met. [C050.4.2]

1.5.3 Exception

Some parcels may be successfully processed on BMC parcel sorters even though they do not conform to the general machinability criteria in [1.5.1](#). The manager, BMC Operations, USPS Headquarters (see [608.8.1](#) for address) may authorize a mailer to enter such parcels as machinable parcels rather than irregular parcels if the parcels are tested on BMC parcel sorters and prove to be machinable. Mailers who wish to have parcels tested for machinability on USPS parcel sorting machines must:

- a. Submit a written request to BMC Operations. The request must list mailpiece characteristics for every shape, weight, construction, and size to be considered. If the letter requesting testing describes a mailpiece that falls within the specifications of pieces that were tested previously, the mailpiece will not be acknowledged for testing.
- b. Define estimated number of parcels to be mailed in the coming year, and preparation level (e.g., destination BMC pallets).



- c. Upon acknowledgement from the manager, BMC Operations, send 100 mailpiece samples to the designated test facility at least 6 weeks prior to the first mailing date. The manager, BMC Operations will recommend changes to ensure machinability of parcels that do not qualify. [C050.4.3]

1.5.4 Exclusions

Items categorized as flats, irregular parcels, or outside parcels may not be prepared as machinable parcels. [C050.4.4]

1.6 Irregular Parcel

An irregular parcel is a parcel not meeting the dimensional criteria in 1.5.1. This processing category also includes parcels that cannot be processed by BMC parcel sorters, including rolls and tubes up to 26 inches long; merchandise samples that are not individually addressed and are not letter-size or flat-size; unwrapped, paper-wrapped, or sleeve-wrapped articles that are not letter-size or flat-size; and articles enclosed in envelopes that are not letter-size, flat-size, or machinable parcels. [C050.5.0]

1.7 Outside Parcel

An outside parcel is a parcel that exceeds the any of the maximum dimensions for a machinable parcel. This processing category also includes high-density parcels (other than books and printed matter) weighing more than 15 pounds and exerting more than 60 pounds per square foot (0.4167 pound per square inch) pressure on their smallest side; cartons containing more than 24 ounces of liquid in one or more glass containers; cartons containing 1 gallon or more of liquid in metal or plastic containers; cans, paints; rolls and tubes longer than 26 inches; metal-band strapped boxes, metal boxes, and wood boxes; articles not mailed in boxes or other containers; harmful matter; hazardous materials except ORM-D materials; and containers with all dimensions exceeding the minimum dimensions for a machinable (regular) parcel, if their coefficient of friction or ability to slide on a smooth, hard surface is not similar to that of a domestic-class fiberboard box of the same approximate size and weight. [C050.6.0]

2.0 Additional Physical Standards by Class of Mail

2.1 First-Class Mail Parcels

2.1.1 Weight

Matter at First-Class Mail rates cannot exceed 13 ounces. First-Class Mail weighing more than 13 ounces is Priority Mail. [C100.1.1]

2.1.2 Nonmachinable Surcharge

Parcels that weigh 1 ounce or less are subject to the nonmachinable surcharge if the piece is greater than 1/4-inch thick. [C100.4.0]

2.2 Standard Mail Parcels

2.2.1 Basic Physical Standards

These standards apply to Standard Mail:

- a. Each piece must weigh less than 16 ounces.



401.2.2.2

- b. Presorted rate and Customized MarketMail pieces are subject to the basic mailability standards in [601](#).
- c. Except for automation basic carrier route rate pieces and merchandise samples mailed with detached address labels (DALs), the maximum size for Enhanced Carrier Route Standard Mail is 14 inches long, 11-3/4 inches high, and 3/4 inch thick. Merchandise samples whose dimensions exceed these maximums may be sent at the Enhanced Carrier Route rates if mailed using DALs, provided that the samples meet all other applicable standards and the DALs meet the standards in [602.4.0](#). [C600.1.1]

2.2.2 Residual Shape Surcharge

Mail that is prepared as a parcel or is not letter-size or flat-size is subject to a residual shape surcharge. Mail that is prepared as Customized MarketMail under [705.1.0](#) is subject also to the residual shape surcharge. There are different surcharges for Presorted rate pieces and Enhanced Carrier Route rate pieces. Only the surcharges for Presorted rate pieces apply to CMM pieces. [C600.3.0]

2.2.3 Nonmachinable Surcharge

The nonmachinable surcharge does not apply to Standard Mail pieces (including parcels) that are claimed at any nonletter rate. [C600.4.2]

2.3 Parcel Post

2.3.1 General Standards

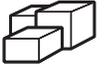
These standards apply to Parcel Post:

- a. Parcel Post pieces measuring over 108 inches in combined length and girth, but not more than 130 inches in combined length and girth, are mailable at the applicable oversized rate.
- b. Items weighing less than 15 pounds but measuring more than 84 inches in combined length and girth are charged the rate for a 15-pound parcel for the zone to which it is addressed (balloon rate). [E120.2.3 and C700.1.0]

2.3.2 Nonmachinable Parcel Post

Mailpieces described in this section that are mailed at the Inter-BMC/ASF Parcel Post, Intra-BMC/ASF Parcel Post, DSCF Parcel Select, or DBMC Parcel Select rates are subject to the applicable nonmachinable surcharge in [453.1.0](#) unless the applicable special handling fee is paid. An oversized parcel as described in [2.3.1a](#) is not subject to the nonmachinable surcharge. Mailpieces are nonmachinable if they meet any of the following criteria:

- a. A parcel more than 34 inches long, 17 inches wide, or 17 inches high.
- b. A parcel less than 6 inches long, 1/4 inch thick, or 3 inches high.
- c. A parcel that weighs less than 6 ounces or more than 35 pounds.
- d. A parcel containing more than 24 ounces of liquid in glass containers, or 1 gallon or more of liquid in metal or plastic containers.
- e. An insecurely wrapped or metal-banded parcel.
- f. A can, roll, or tube, or wooden or metal box.
- g. Books, printed matter, or business forms weighing more than 25 pounds.



- h. A high-density parcel weighing more than 15 pounds and exerting more than 60 pounds per-square-foot pressure on its smallest side.
- i. A film case weighing more than 5 pounds or with strap-type closures, except any film case the USPS authorizes to be entered as a machinable parcel under [1.0](#) and to be identified by the words “Machinable in United States Postal Service Equipment” permanently attached as a nontransferable decal in the lower right corner of the case.
- j. Parcels with characteristics (such as inadequate packaging) that could result in damage to the contents of the mailpiece, other parcels, or postal machinery if mechanical sortation is used. [C700.2.0]

2.4 Bound Printed Matter Parcels

2.4.1 General Standards

Pieces mailed at Bound Printed Matter rates may not weigh more than 15 pounds. [C700.1.0]

