

Machineable Mail best practices for Personalized Mail

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1. Acceptable material

1.1 Acceptable material overview

We recommend these specifications for the best performance in our automated equipment.

1.2 Flexibility

Our sorting equipment needs the item to be flexible enough to bend around rollers without damaging your mail item or causing damage to our equipment.

Standard items

To ensure the best flexibility, your mail item should bend around a circular surface.

Oversize items

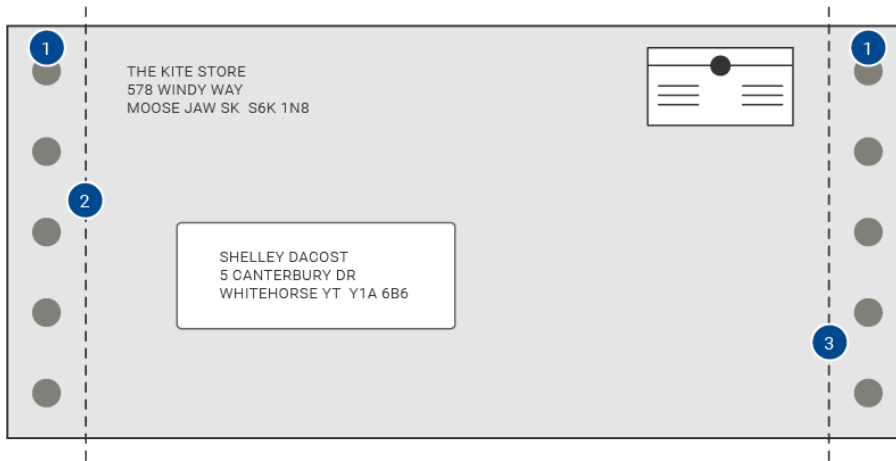
Oversize items don't have to bend. You may package them in material that's either flexible or rigid, such as paperboard or corrugated cardboard.

Cardboard boxes may have difficulty entering our mail processing machines. In certain cases, we allow boxes if they're enclosed in an envelope or wrapper that covers their sharp edges enough to enable a smooth entrance into the machines. If you plan to include cardboard boxes in your mail items, we recommend you first have them assessed by a Canada Post representative.

1.3 Self-mailer construction

Because of their unique design and construction, self-mailers have certain specific requirements besides those outlined in the [Enclosures section](#).

Example of a self-mailer



1. Pinhole feed strip

You must remove pinhole feed strips before mailing. These strips may have been attached to the self-mailer during its production.

2. Tear-off stubs

You may only locate tear-off stubs to the left of the destination address.

3. Perforations

You must produce perforations without punching out any paper.

Perforations along tear-off stubs should be slightly displaced from one layer to another so that the perforations don't align with one another. This will increase the bending resistance of the self-mailer.

1.4 Window material

If you're using window envelopes, make sure that you cover all windows with transparent material.

Transparent window material requirements

The transparent window material must have:

- Enough transparency to allow visibility with a haze up to 75%
- Uniform clarity
- No wrinkles, creases, or blemishes
- A gloss reading (on the side facing out) of 159 gloss units or less

1.5 Paper type

There are several things you should keep in mind when you use paper for the outer covering of the mail item.

Paper requirements

The paper used for the outer covering of the mail item should:

- Be opaque enough to prevent any printing or graphics from showing through the envelope (we recommend an opacity of 80% or more)
- Not be translucent
- Be smooth (25 to 330 Sheffield Smoothness Units) with no raised areas
- Have a reflectance between 30% and 96%, excluding the 2D barcode quiet zone
- Be clear of:
 - Dark fibres
 - Background patterns
 - Textures
 - Watermarks
- Be clear of fluorescent ink

For more information, refer to [Appendix A: Test – Outer cover material](#).

Optimal card size is 165 mm (length) x 108 mm (width) with paper grain direction long.

Unwrapped items (Oversize only)

Oversize items don't always need a wrapper.

You may send open items without a wrapper such as:

- Brochures
- Catalogues
- Magazines
- Newspapers

Open items without a wrapper must:

- Be at least 0.5 mm thick and weigh at least 10 g.
- Have cover pages strong enough to withstand machine processing (paper at least twice as thick as the inside pages).
- Be bound along the longest side.

- Be bound so they stay flat and even without bulges. Binding methods such as staples, glue, or stitches are acceptable, but spring spines aren't, since they cause items to bulge.
- Be the same width as the mail item, not folded to cover only part of it, if you use gatefold covers.

2. Enclosures

2.1 Enclosures overview

We allow enclosures if they don't:

- Damage postal equipment
- Damage other mail
- Cause injury to postal employees

Enclosures requirements for best processing

For the best processing, make sure the mail item doesn't vary in thickness more than 2 mm across its length and width. We accept enclosures that vary in thickness if the thickness of the thinnest enclosure is no less than half the thickness of the thickest enclosure. Non-paper can tear through envelopes or wrappers during machine processing. To prevent this, give special attention to both the strength of wrappings and how well the enclosures fit in them.

2.2 Examples of acceptable non-paper enclosures

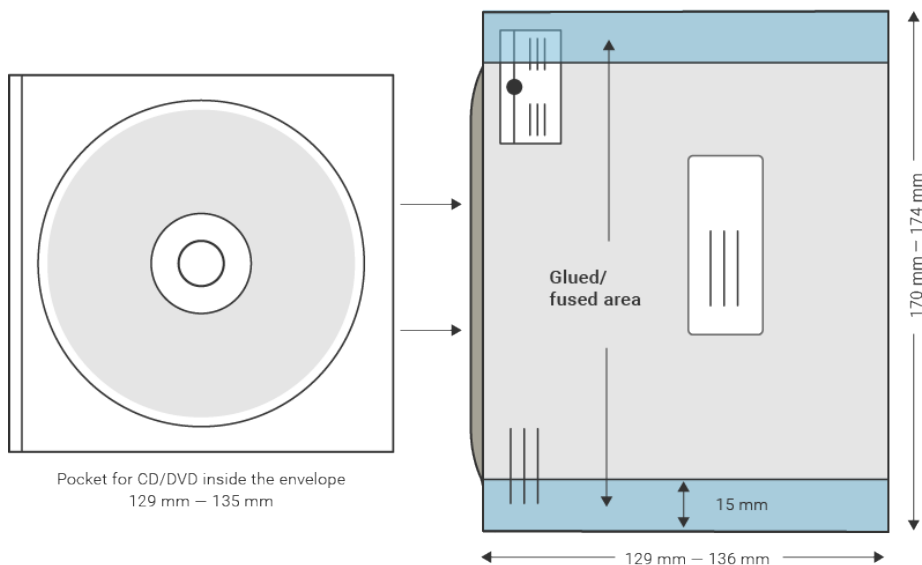
You can include non-paper enclosures with your mail items. Some examples are found below.

Flexible magnets

We accept magnets as enclosures if they're:

- Not so strong that they cause envelopes to stick to each other or to the equipment
- Firmly attached to the mail item
- Attached so that the non-magnetized (image) side faces the address side of the envelope

CD/DVD



We'll accept a single CD or DVD if you place it inside a pocket in a flexible envelope. You can't enclose it in a hard jewel case.

You must also meet the following requirements:

- The envelope dimensions must be no more than 174 mm x 136 mm and no less than 170 mm x 129 mm
- The inside pocket must be between 129 mm and 135 mm in width
- You must glue (fuse) the left and right edges of the envelope as shown
- You must glue the trailing edge of the envelope along its entire height

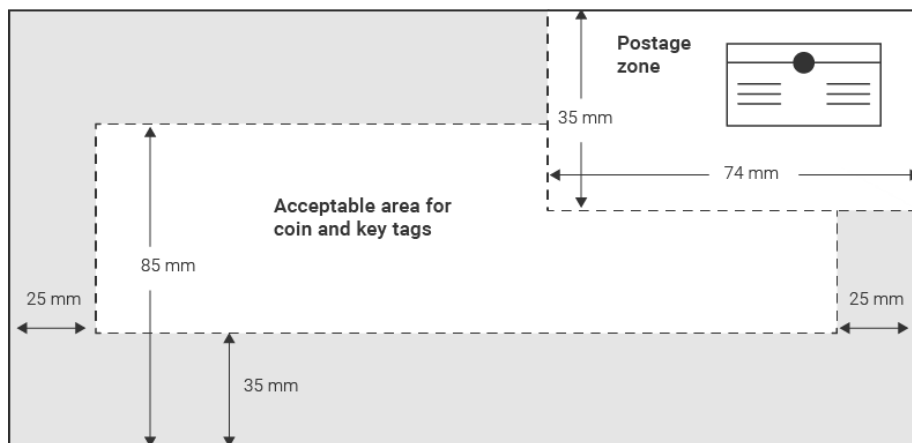
You must submit designs that deviate from these requirements to us for approval.

Plastic card

We'll accept a single plastic card (for example, a credit card) if it's:

- Firmly attached to the insert so the card can't move inside the envelope
- Positioned at least 19 mm up from the bottom edge and at least 10 mm from the right edge

Key tags/single coin



We'll accept key tags/single coin as enclosures if they're:

- Firmly attached to the insert with glue or adhesive to prevent any movement
- Positioned:
 - Between 35 mm and 85 mm up from the bottom edge of the envelope
 - 25 mm in from the left and right edges of the envelope
 - Outside the postage zone



Please note: Key tags must be made of a flexible material (not metallic). You must cover any windows you use to make the coin visible.

2.3 Additional requirements for Oversize mail items

There are additional Machineable Mail requirements you should keep in mind for Oversize mail items.

In envelopes (window and non-window)

- Enclosures that are more than 1.5 mm thick should be no more than 25 mm shorter or narrower than their envelope.
- If an enclosure doesn't meet these dimensions, secure it to another enclosure that does.
- If an enclosure must be read through an envelope window but isn't secured to the

envelope, it could shift position and become unreadable. To prevent this, make sure it's no more than 15 mm smaller than the envelope in either length or width.

In transparent wrappers

The wrapper must not exceed the length or the width of the enclosure by more than 20 mm, or by more than 40 mm in length and 10 mm in width.

In unwrapped items

To confirm that an enclosure is an integral part of your unwrapped mail item, you must do a "pinch test".

To do the pinch test:

1. Place the middle of the item's fold (or spine) in the palm of your hand between your thumb and fingers.
2. Grasp the item tightly and shake it back and forth (horizontally) with its open end facing downward.

2.4 Examples of unacceptable non-paper enclosures

- Bottle caps
- Sharp objects such as pins
- Seeds
- Keys
- Jewellery
- Packets of liquid
- Pencils and pens
- Glass
- Powdered materials

3. Proper envelope construction

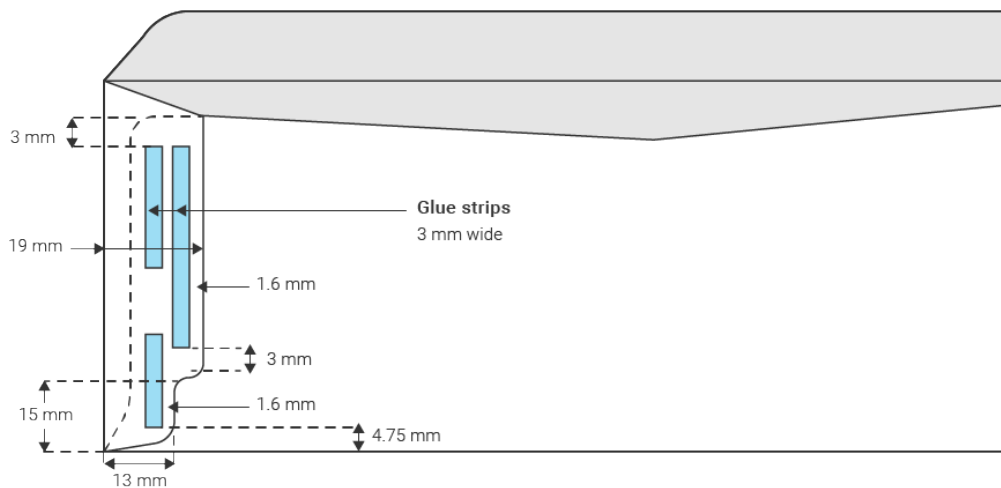
It's important that your envelopes are constructed properly to ensure best performance in our automated equipment.

Envelopes

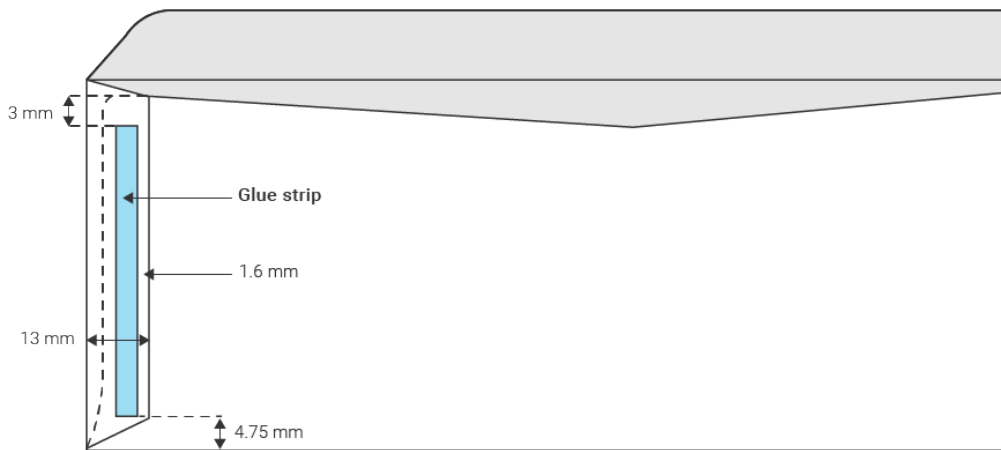
To make sure we smoothly process your envelopes we recommend that the back panel of your envelope cover the side flaps.

If you construct your envelopes in such a way that you cover the back panel with the side flaps, then follow the illustrated sealing requirements shown in the following illustrations:

Option 1



Option 2



Self-mailers

Most self-mailers are created from a single piece of durable paper or cardstock, which is folded into panels and secured with adhesive tabs or glue spots to keep it tightly closed during transit.

Single sheet

For the best processing, clip or spot seal the right and left edges of the self-mailer in addition to the top.

Fold-over self-mailers may have perforations around the edges for opening the item.

Multiple sheet

For the best processing, continuously seal all four edges, preferably with no gaps larger than 1 mm.

If you use a continuous glue strip, you must apply it along the entire length of the shorter panel's top edge. The top and bottom panels must not meet in the middle.

If you're using a perforated clip seal, test the strength of your perforation by bending it back and forth at least five times. This will ensure your mail item is strong enough to withstand machine processing.

4. Addressing requirements

4.1 Addressing requirements overview

In any given mailing, our automated equipment must be able to read at least:

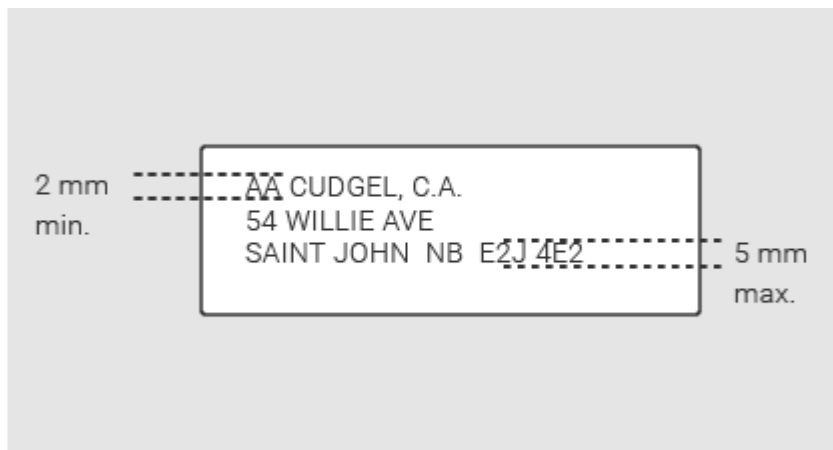
- 95% of the addresses on Standard mail items
- 85% of the addresses on Oversize mail items

If the mailing doesn't meet this expectation, we may ask that you redesign future mail items.

4.2 Address blocks

For the best readability, use the following guidelines when printing addresses.

Address block guidelines



- The address block should be left justified (aligned to the left margin).
- You should print all the characters in the address block in the same font at the same height. The best character height is between 2 mm and 5 mm.
- Don't use punctuation unless it's part of a proper name (for example, ST. JOHN'S).
- We recommend uppercase.
- There should be at least 0.5 mm of space and no more than one blank line when determining the space between address lines.
- The municipality, province or territory, and postal code should always appear on the same line.
- There should be one space between the municipality and province or territory.
- There should be two spaces between the province or territory and postal code.
- The number of characters in one line should ideally be less than 30, but no more than 40. If the last line of the address has more than 40 characters, move the postal code to the next (last) line by itself, and align its left margin with the other address lines.
- If you skew the address block, the angle should be less than five degrees relative to the bottom edge of the mail item.



For detailed information on the format, structure, and acceptable abbreviations for destination addresses, please refer to our [Addressing guidelines](#).

Postcards

If you use postcards, the dividing line between the address block and graphics or text must be at least 0.5 mm and 5 mm to the left of the address.

4.3 Acceptable fonts

Fonts must have characters that are clear and well-defined.

We won't accept white font on a black or a dark coloured background.

We've tested these recommended script fonts in our automated equipment:

- Bradley Hand
- Bradley Plain
- Arphic Pengyokaisho
- Briem Plain
- Briem Italic
- Caflisch Plain
- Caflisch Italic
- Lucidia Plain
- Lucidia Italic

4.4 Address labels

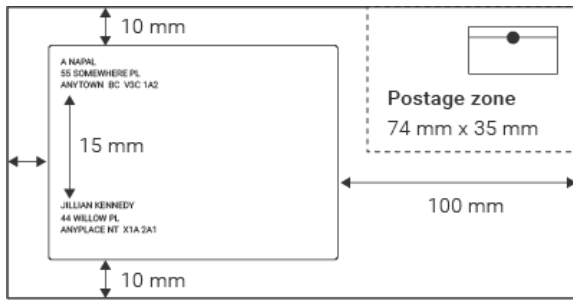
If you're using address labels, make sure that the label is:

- Firmly affixed to the item
- Found in the address zone and that you respect the quiet zone around the address
- White or a light colour

5. Windows

If you're using windows on your mail item, make sure that you cover them all with transparent materials.

Window envelope guidelines



The address window must be:

- Found in the address zone. The address zone must be located 100 mm from the right side of the item.
- Large enough to show all of the destination address even if the enclosure shifts in the envelope.

The address must be separated from the return address (in the top left of the address zone) by 15 mm.

The postage zone is located in the top right of the item and measures 74 mm by 35 mm.

Auxiliary window

Besides the main address window, other (auxiliary) windows may appear either on the front or back of the mail item. If you put the auxiliary window on the front of the mail item, it must:

- Be at least 10 mm away from the edges
- Be clearly separated from the address window by at least 7 mm
- Not be located in the postage zone

To accommodate shifting, leave 7 mm to 10 mm around the address block.



For more information, refer to [Appendix A: Test – Outer cover material](#).

Oversize items

If you put the auxiliary window on the back of the mail item, it must be at least 15 mm away from the edges.

6. Postage zone requirements

The postage zone is an area set out for the placement of postage. It's found in an area 100 mm by 35 mm in the top right of the mail item.

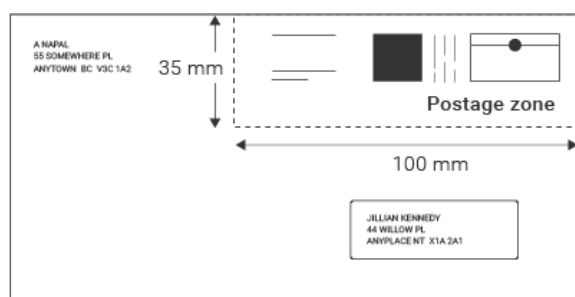
Paid by postal Indicia

Mail items paid by postal indicia may have graphics inside the postage zone, as long as people can easily read the postal indicia.



For postal indicia specifications and artwork, visit our [Postal indicia tool](#).

Paid by postage meter impression



Mail items paid by postage meter impression must not have any graphics inside the postage zone.

For more information on postage meter impressions, see [Paying for your mailing](#).

7. Quiet zone requirements

Quiet zones are areas on a mail item that you must leave clear of printing, images, and dark colours. This ensures that our automated equipment can easily find and read addressing information, then apply the barcode that makes efficient processing possible.

Standard items

Our equipment applies a fluorescent barcode on the back side of the item. We recommend the following quiet zones on the back of the item:

For items with horizontal address orientation

The area 15 mm high by 140 mm long measured from the bottom left edge.

For items with vertical address orientation

The area 140 mm high by 15 mm long measured from the bottom right edge.

8. Other considerations

There are several other things you should consider when preparing your Machineable Mail items, especially pertaining to Repositionable Notes (RPNs).

Application of Repositionable Notes (RPNs)

We accept Repositionable Notes (RPNs) on items if:

- They're square
- They don't exceed 76.2 mm x 76.2 mm (3 inches x 3 inches)
- Their glue strips cover at least one-third of the total width of the note (for example, a 25.4 mm [1 inch] glue strip on a 76.2 mm [3 inch] note)
- They're applied by a machine, not manually
- You position the glue strip across the top edge of the label
- They don't display addressing information
- They don't have fluorescent or phosphorescent ink
- They're applied on the front of mail piece in the address zone
- You apply only one note per mail item

We recommend RPNs be at least 5 mm from the address block and 10 mm from all edges.

9. Customer owned barcode requirements

You may apply barcodes to the left of the address block or above it.

Acceptable barcodes

- Codabar
- DUN-14
- Interleaved 2-of-5
- ITF-14
- MSI Plessey
- Telepen
- Tri-Optic
- EAN Bookland
- EAN-JAN-13
- EAN-JAN-8
- EAN-UCC 14
- EAN-UCC 14 (ITF)
- SCC-14
- SCC-14 (ITF)
- UPC-A
- UPC-E
- UCC 12
- Plessey
- UPC Shipping container
- Code 39 (if tested by Canada Post first)
- Code 93

If you position the barcode vertically

If positioned vertically, you must place the barcode at least 5 mm from the left edge of the address block.

If you position the barcode horizontally

If positioned horizontally, we recommend placing the barcode at least 5 mm above the addressing block, as part of the address block.

Certain barcodes may interfere with mail processing, so please refer to the acceptable barcodes. You must cover or place such barcodes inside the envelope.

If using other barcodes, please contact the Commercial Service Network team (See [How to assess your Machineable Mail items before mailing](#)).

10. How to assess Machineable Mail items before mailing

To ensure that we can process your mailing on our machines and that your mail items meet the requirements for Machineable Mail, we offer free evaluation services.

You have several assessment options.

Standard self-assessment tool

Complete your own self-assessment by using our [Machineable Mail self-assessment tool](#).

Electronic sample evaluation

Contact a Commercial Service Network (CSN) representative at 1-866-757-5480 to provide an electronic sample (PDF) of your mail item.

The electronic sample must clearly show how you'll construct the item and include the:

- Finished item size (for example, length, width, thickness, and approximate weight)
- Paper basis weight
- Fold locations (for self-mailers)
- Sealing location and sealing method (for self-mailers and envelopes)
- Window location (if applicable) and address location

Our Commercial Service Network (CSN) representative may ask for more testing if the electronic sample doesn't provide enough information. We need physical approval testing when you use creative features.

Physical approval testing

Customers requiring a physical test of their mail items on our mail processing equipment must send 200 samples of the final version of the mailing. Call a Commercial Service Network (CSN) representative at 1-866-757-5480 to get a service ticket number and the address to send your samples. This process is optional, unless your mail item uses creative features defined in the mandatory requirements section.

To test readability, you must address your mail items. You can use the same address on all items.

Any valid Canadian address is acceptable.

When 200 samples aren't available for physical testing, our Mail Standards and Testing team can give feedback on a to-scale mock-up (or prototype). To have your prototype evaluated, contact a Commercial Service Network (CSN) representative at 1-866-757-5480.



Please note: If we provide feedback on a prototype, it doesn't mean we've approved it. However, you may find our feedback helpful before you produce 200 items for physical testing.

11. Appendix A: Test – Outer cover material

The following table explains how to test specific outer cover material characteristics.

How to test outer cover material characteristics

<i>Characteristic</i>	<i>Test</i>	<i>Required results</i>
<i>Electrostatic charge retention</i>	American Standards Testing Method (ASTM) D4470	Less than 2.0 kV
<i>Ink absorbancy</i>	1. Use a spatula to apply a thick layer of K&N testing ink over a spot larger than the aperture of the reflectance photometer. 2. Leave the ink on the	Maximum reflectance: 90%

<i>Characteristic</i>	<i>Test</i>	<i>Required results</i>
	<p>paper for exactly 120 seconds. Apply enough ink so that the spot stays well wetted for the full 120 seconds.</p> <ol style="list-style-type: none"> At 120 seconds, use a spatula to remove the excess ink. Wipe off the rest of the unabsorbed ink with a soft towel. Wait 24 hours. Adjust a diffuse reflectance photometer to read 100% using the Commission Internationale de l'Éclairage (C.I.E.) Y tri-stimulus filter, illuminant "C", and a sample of the front surface of the tested sample. Read the diffuse reflectance over the ink spot. 	
<i>Luminescence</i>	Compare the sample with "Domtar Lynx Opaque Cover" or a similar card stock as we determine from time to time.	Less than these cards

<i>Characteristic</i>	<i>Test</i>	<i>Required results</i>
<i>Opacity</i>	Technical Association of the Pulp and Paper Industry (TAPPI) - T425	80% or greater
<i>Reflectance</i>	Technical Association of the Pulp and Paper Industry (TAPPI) - T452	Minimum area reflectance: 30% Maximum area reflectance: 96% Maximum variation: 5%
<i>Smoothness</i>	Technical Association of the Pulp and Paper Industry (TAPPI) Useful Method - UM-518	Between 25 and 330 Sheffield Smoothness Units
<i>Thickness - cards or items ready for mailing</i>	Technical Association of the Pulp and Paper Industry (TAPPI) - T411	Not less than 0.18 mm