

Envelope Layout Standards for machine-sorted Bulk Mail

VolumePost™, Business Standard and Approved FreePost™

Effective from 1 October 2010



Machine-sorted Bulk Mail

This details the layout standards for machine-sorted Bulk Mail.

These standards apply to:

- VolumePost
- Business Standard
- Approved FreePost.

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Introduction

This guide will help you to meet the envelope layout standards for machine-sorted mail. This will enable you to access the best postage rates as well as ensuring your mail gets processed efficiently and reliably.

Please adhere to these standards when you are preparing mail for:

- **VolumePost**
- **Business Standard**
- **Approved FreePost.**

These standards apply from 1 October 2010 and replace all previous versions.

Lodging your mail

Before you lodge your mail, it's essential to double check:

- you have completed the lodgement documentation correctly
- your mail meets the applicable minimum volumes and product requirements.

If the documentation does not reflect the characteristics of the actual lodgement, we'll change it and notify you of the change – this could involve a higher postage rate being applied.

If you are unsure about any aspect of your envelope design and layout, please contact us.

You can email us at envelopelayouts@nzpost.co.nz or call 0800 501 501.

Additional information

To ensure your mail piece meets our addressing accuracy and address layout standards, including terms and conditions and other product requirements, refer to our website at www.nzpost.co.nz/addressing and www.nzpost.co.nz/bulkmail.

Please note, when developing this guide we have endeavoured to make this as comprehensive as possible. If, however, other factors are present in your mail that prevent it from being machine-sorted, that mail may not be eligible for Bulk Mail postage rates.

1.0 Which envelope sizes are machinable?

Not all envelope sizes can be processed by our sorting machines. This table lists envelope stock currently used in the domestic New Zealand market whose dimensions are compatible with our machines.

The maximum machineable dimension is 165mm high by 240mm long.

Envelope dimensions

Envelopes other than these common sizes are acceptable provided they meet the requirements for mail piece dimensions listed on page 14.

Envelope type	Industry standard envelope sizes (height x length)
E8	90mm x 152mm
E9	92mm x 165mm
E16	92mm x 191mm
DLE	114mm x 225mm
DLEE	114mm x 235mm
Max POP	120mm x 235mm
Specialist Max POP	120mm x 235mm
C6	114mm x 162mm
CM	102mm x 215mm
C5	162mm x 229mm

1.1 Key areas

Our sorting machines can only detect information printed in certain areas, which is why specific layout requirements apply.

There are three key areas

- **Sender address area**
- **Address block and object area**
- **Indicia area**

You can print in these areas, subject to the clear zone rules and diagrams on pages 4-13.

Sender address area

When the sender address is located on the front of the envelope it must be located in the top left hand corner in an area no larger than 40mm high by 100mm wide.

There are specific requirements for the format of the sender address to help ensure it is not interpreted by our sorting machines as the delivery address. Please refer to the section titled Sender address area on page 18.

Address block and object area

The address block (or window) which contains the delivery address can be located anywhere within the address block and object area that extends across the width of the envelope subject to the clear zone rules on pages 4-5.

The object area can contain text, graphics or colours providing they don't contain or resemble an address, as this could be interpreted as a delivery address.

Movement in the window – envelope contents need to be sufficiently secure to prevent movement that may:

- obscure or prevent the complete address being read, or
- result in a paper edge exposing the back of the envelope through the window.

A typical situation where movement can occur is when a Max POP envelope is used for a folded DL letter.

Indicia area (PermitPost™ impression)

Both the PermitPost impression and delivery address must be on the same side of the envelope. The PermitPost impression is not only used to validate payment, it is also used by the sorting machines to orientate the envelope to assist in the location of the delivery address. Page 19 outlines the requirements for the PermitPost impression.

1.2 Clear zones

Machine-sorted Bulk Mail needs to include a number of clear zones that enable the sorting machines to locate or read specific information that is critical for us to process your mail efficiently.

There are three areas where clear zones apply

- **Delivery address clear zone**
- **Indicia area clear zone**
- **Sortcode clear zone**

1. Delivery address clear zones

To enable us to accurately read the delivery address, we need a clear zone around the delivery address. The requirements for this clear zone differ depending on whether you are using a window envelope or printing the address directly onto labels or non-window envelopes.

The reason for this is because with window envelopes the contents, and therefore location of the address, may move. If the delivery address moves next to the edge of the window, it can affect the amount of clear space around it.

Where addresses are printed directly onto envelopes or labels, the location of the address is fixed, so different requirements apply.

Our clear zone requirements in relation to the delivery address details are as follows:

When window envelopes are used

There needs to be an 8mm clear zone around both:

- the perimeter of the delivery address
- the outside perimeter of the window.

Other content can appear elsewhere in the window providing it does not resemble an address (ie. left justified blocks of text.)

For DLE and E8 envelopes, some of the 8mm clear zone below the window can overlap with the 15mm sortcode clear zone.

When the delivery address is printed directly onto envelopes or labels

There needs to be an 8mm clear zone around:

- the perimeter of the delivery address only.

Please note, for both window and non window envelopes the 8mm clear zone around the perimeter of the delivery address can include:

- a horizontal customer number and/or barcode (please refer to page 17)
- white and/or an approved Pantone colour (please refer to page 15)
- other graphics providing they have a black content of less than 30%. We will need to assess and approve these graphics on a case by case basis.

2. Indicia area clear zone

When using a PermitPost impression, make sure there is:

- a clear zone of 5–10mm between the top and right hand edges of the envelope and the PermitPost impression
- a 10mm clear zone to the left of and immediately below the PermitPost impression.

Clear zones continued

If any graphics spill over into this clear zone, they must be white and/or an approved Pantone colour.

When using a Facia Indicia Mark (FIM), make sure there is:

- a minimum clearance of 10mm all the way around the FIM bars (Approved FreePost envelopes use the type 3 FIM i.e. the triple black bars)
- a minimum 10mm clearance between the FIM and any product logo.

If any graphics spill over into this clear zone, they must be white and/or an approved Pantone colour.

3. Sortcode clear zone

The sortcode clear zone is a 15mm high area that runs across the bottom of the envelope and is critical for us to machine sort mail as this is where we print the sortcode barcode.

This entire area needs to be kept clear of logos, graphics and text, however it can include an approved Pantone colour and/or white.

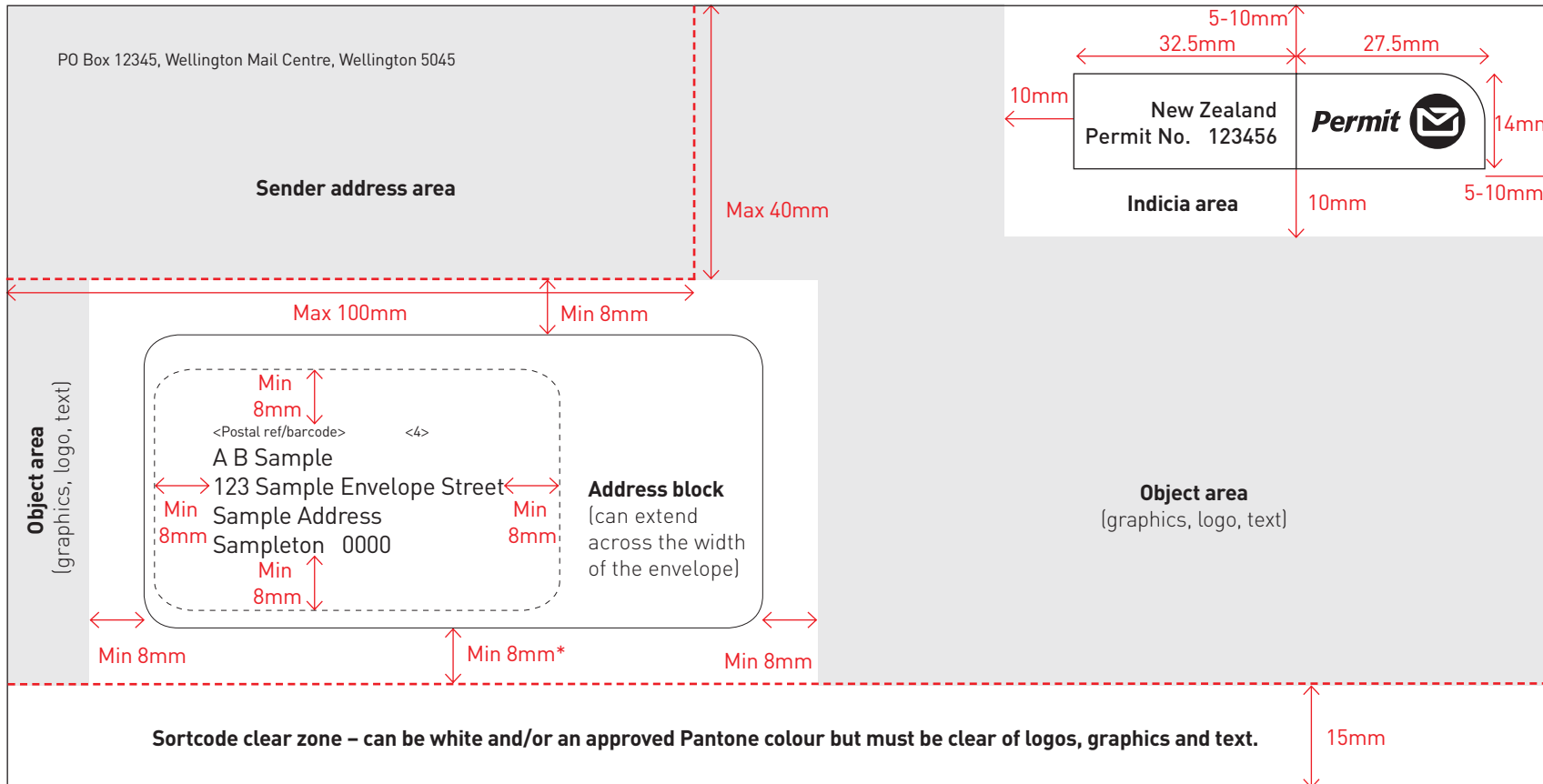
Front of DLE – measurements

(diagram shown at 100%)

Length = 225mm

Height = 114mm



This example shows the delivery address clear zones for a window envelope. If you are printing the delivery address directly onto an envelope or label, an 8mm clear zone is only required around the delivery address itself.

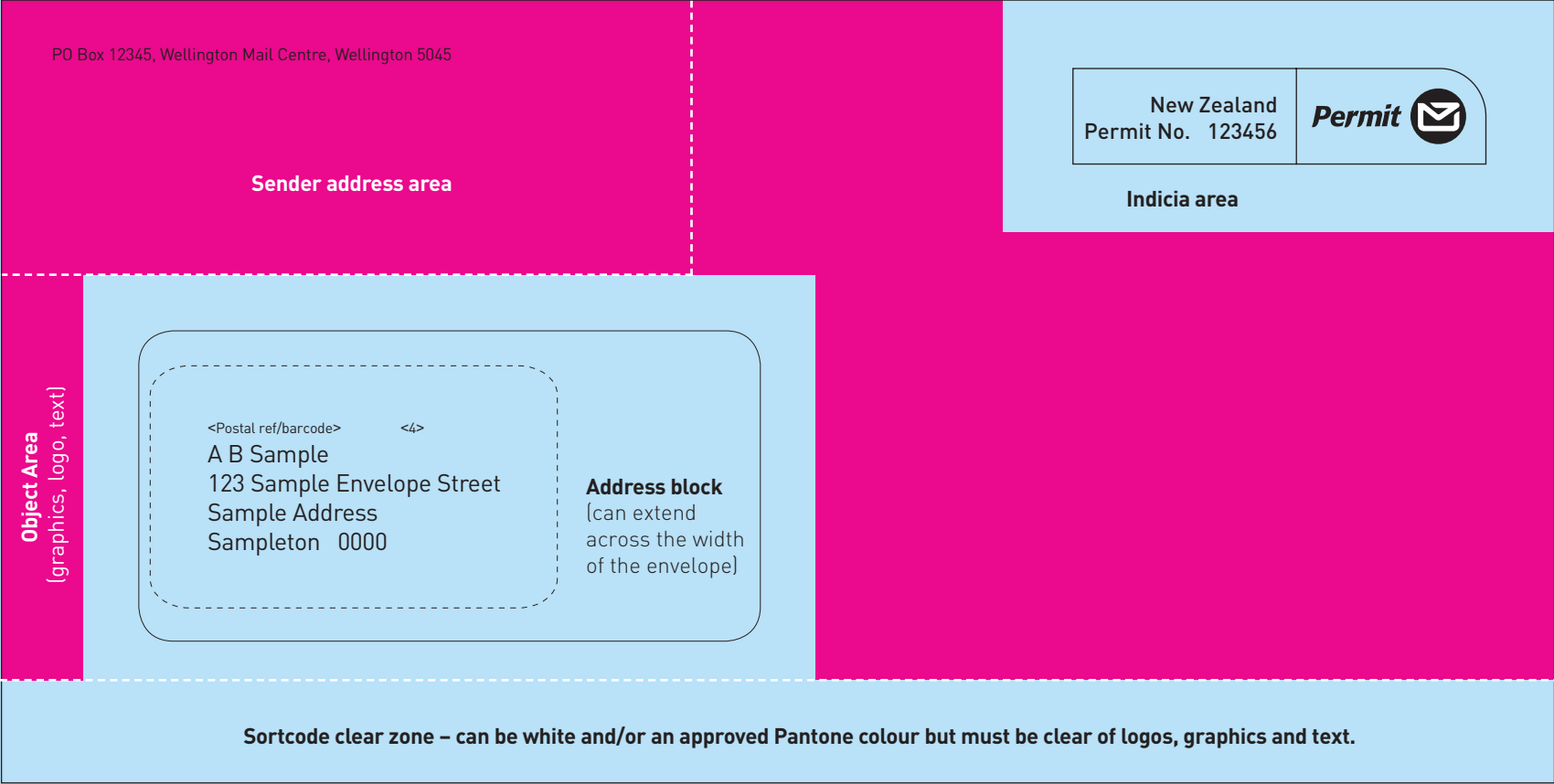


* For DLE, Max POP, E8 and some other envelope or window sizes, there may be insufficient space for an 8mm clear zone below the window. In these cases the 8mm clear zone can overlap with the 15mm sortcode clear zone.

Front of DLE – colour guide

(diagram shown at 100%)

 = any colour can be used in this area  = only approved Pantone colours or white can be used in this area

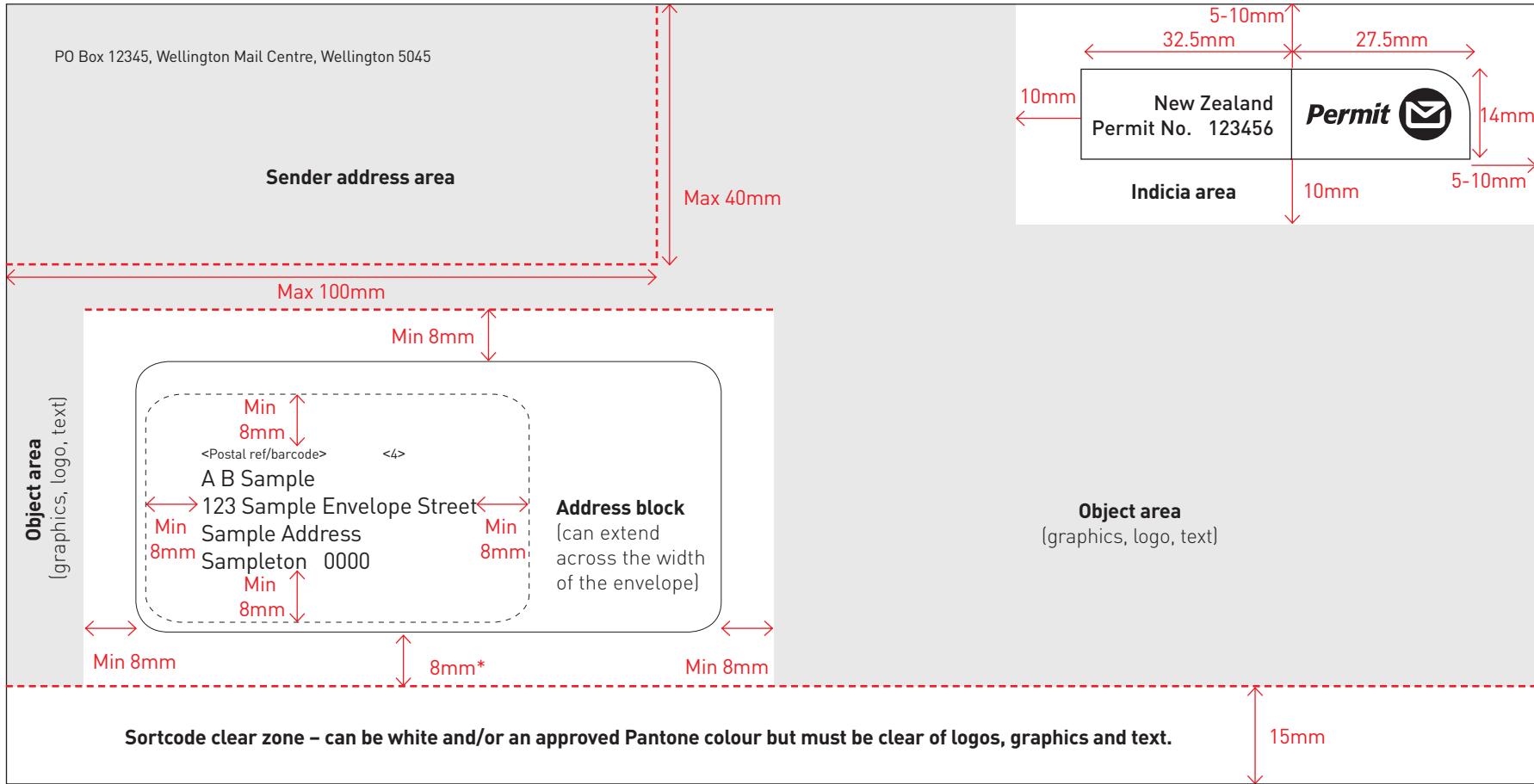


Front of Max POP – measurements

[diagram shown at 100%]

Length = 235mm Height = 120mm



This example shows the delivery address clear zones for a window envelope. If you are printing the delivery address directly onto a envelope or label, an 8mm clear zone is only required around the delivery address itself.

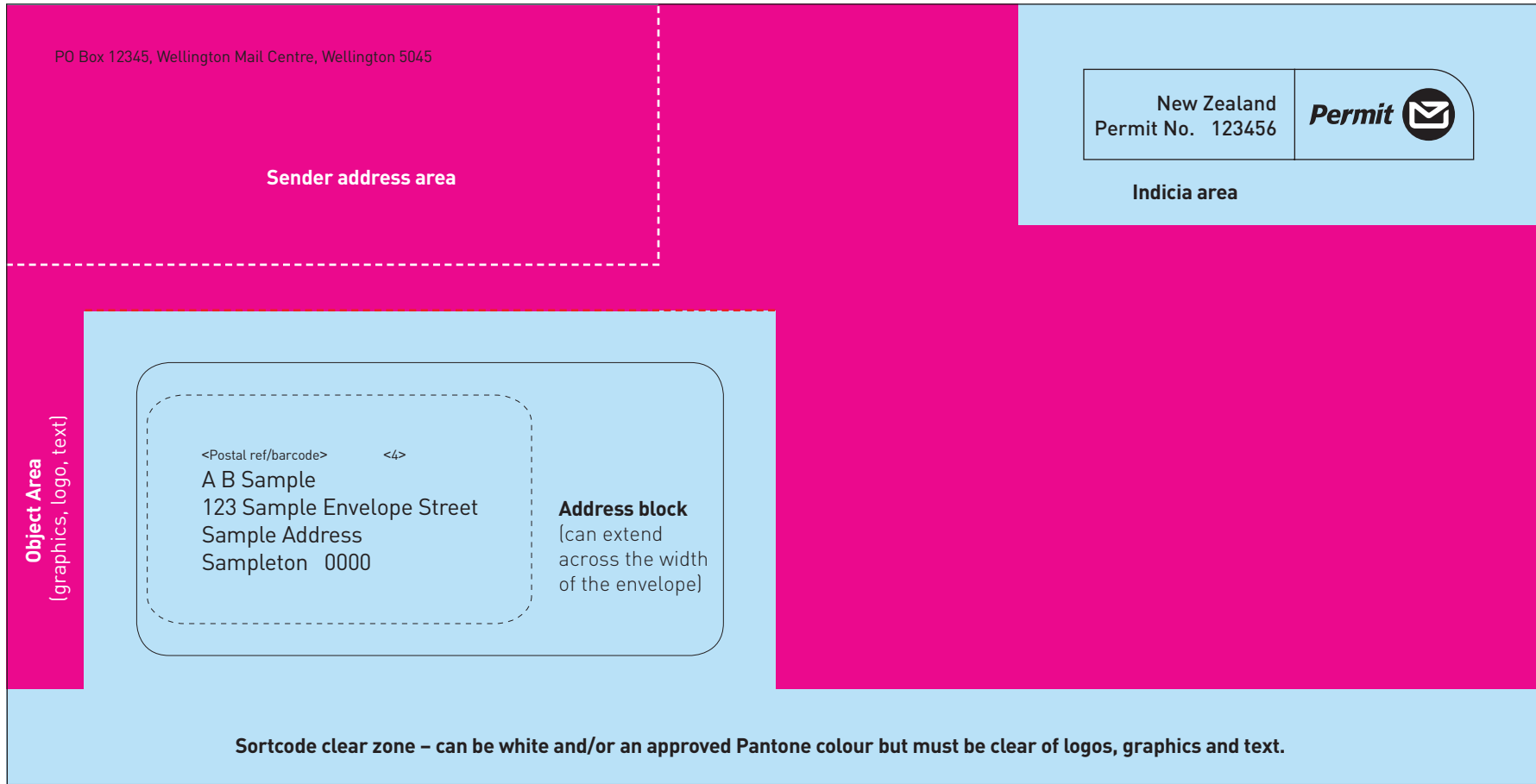


* For DLE, Max POP, E8 and some other envelope or window sizes, there may be insufficient space for an 8mm clear zone below the window. In these cases the 8mm clear zone can overlap with the 15mm sortcode clear zone.

Front of Max POP – colour guide

(diagram shown at 100%)

 = any colour can be used in this area  = only approved Pantone colours or white can be used in this area



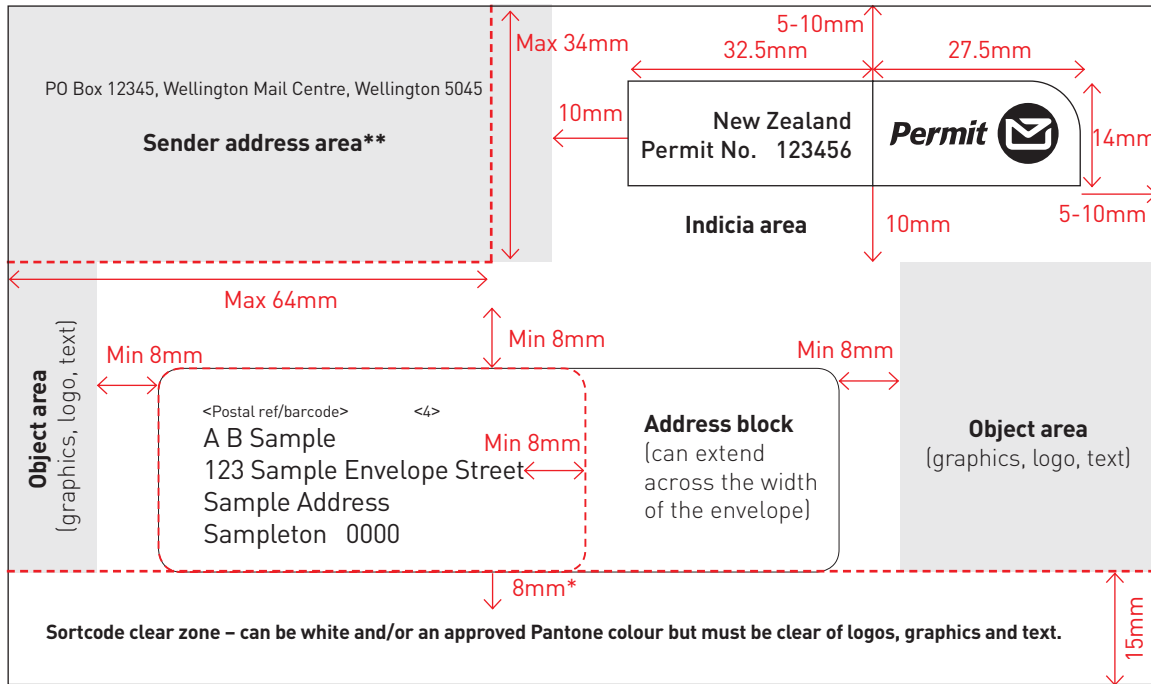
Front of E8 – measurements

(diagram shown at 100%)

Length = 152mm

Height = 90mm

This example shows the delivery address clear zones for a window envelope. If you are printing the delivery address directly onto a envelope or label, an 8mm clear zone is only required around the delivery address itself.





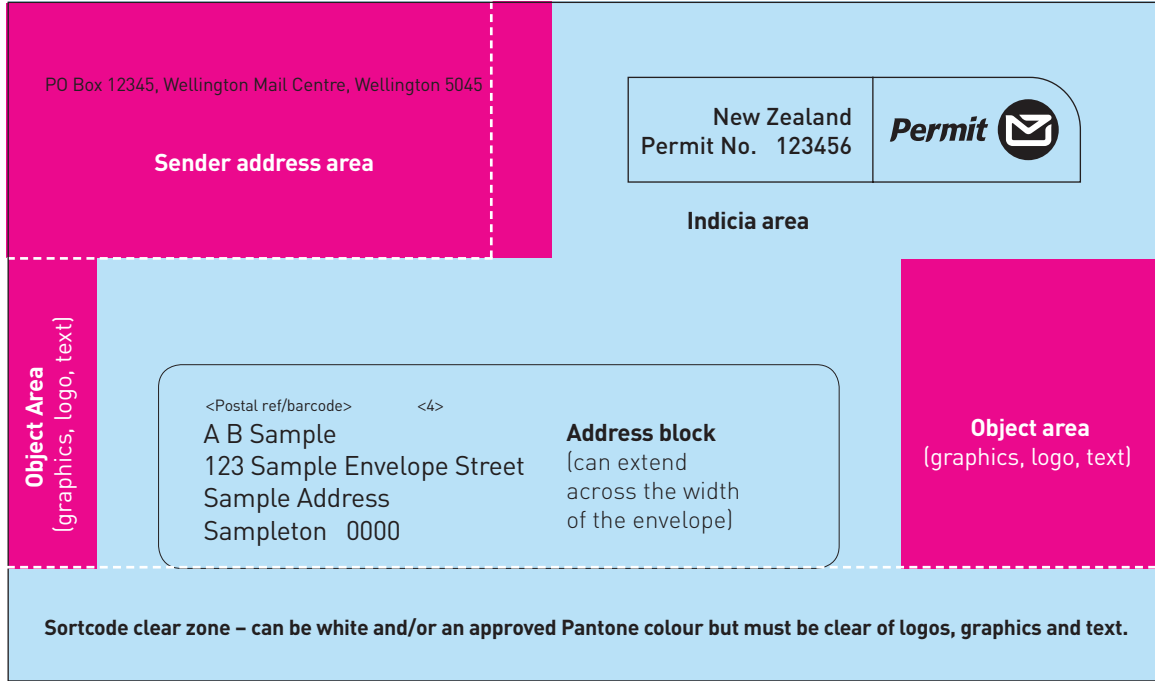
* For DLE, Max POP, E8 and some other envelope or window sizes, there may be insufficient space for an 8mm clear zone below the window. In these cases the 8mm clear zone can overlap with the 15mm sortcode clear zone. This example shows the delivery address clear zones for a window envelope. If you are printing the delivery directly onto a envelope or label an 8mm clear zone is only required around the delivery address itself.

** For E8 envelopes the maximum sender address area is 34mm height x 64mm length.

Front of E8 – colour guide

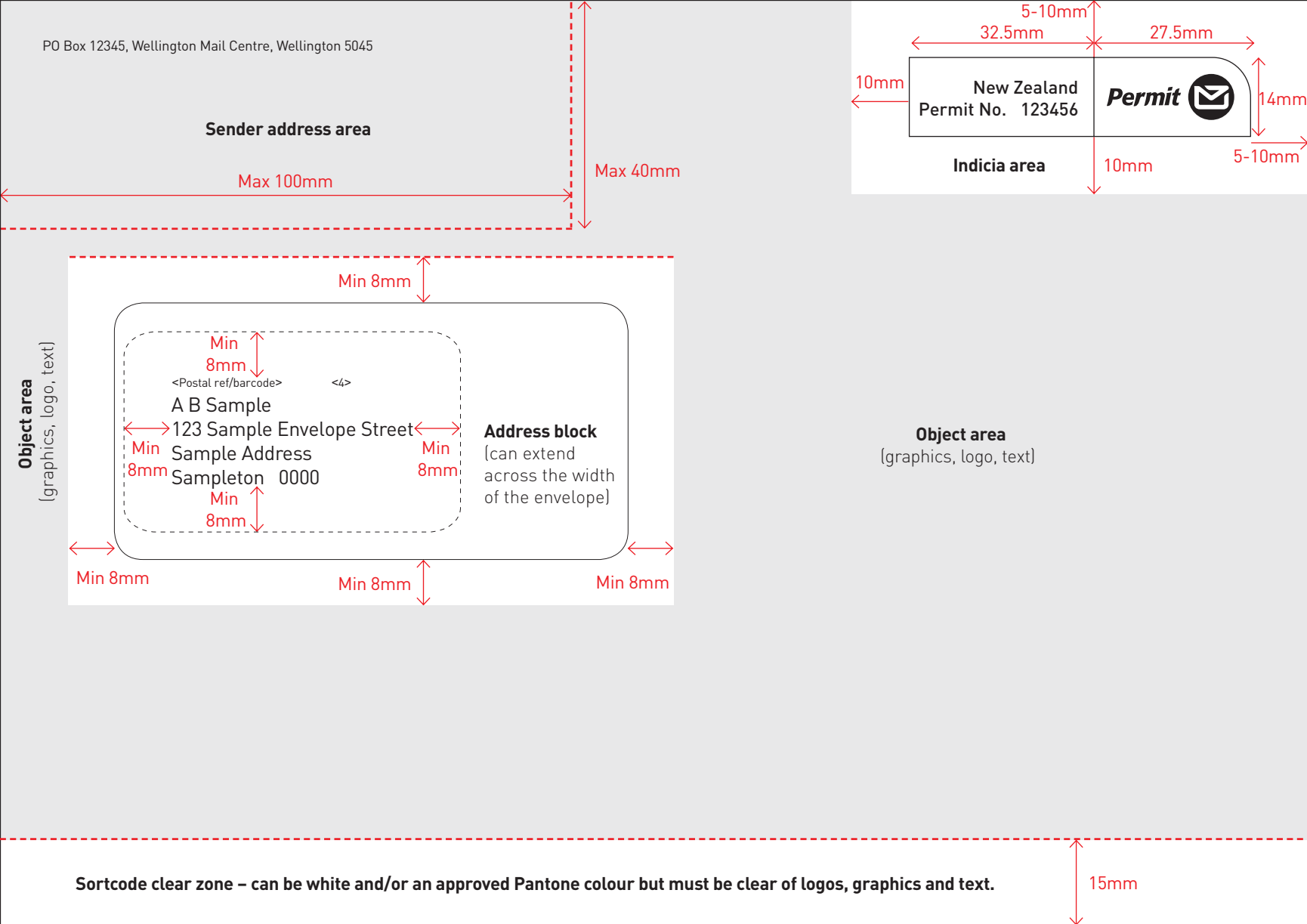
(diagram shown at 100%)

 = any colour can be used in this area  = only approved Pantone colours or white can be used in this area



Front of C5 – measurements

(diagram shown at 100%) Length = 229mm Height = 162mm

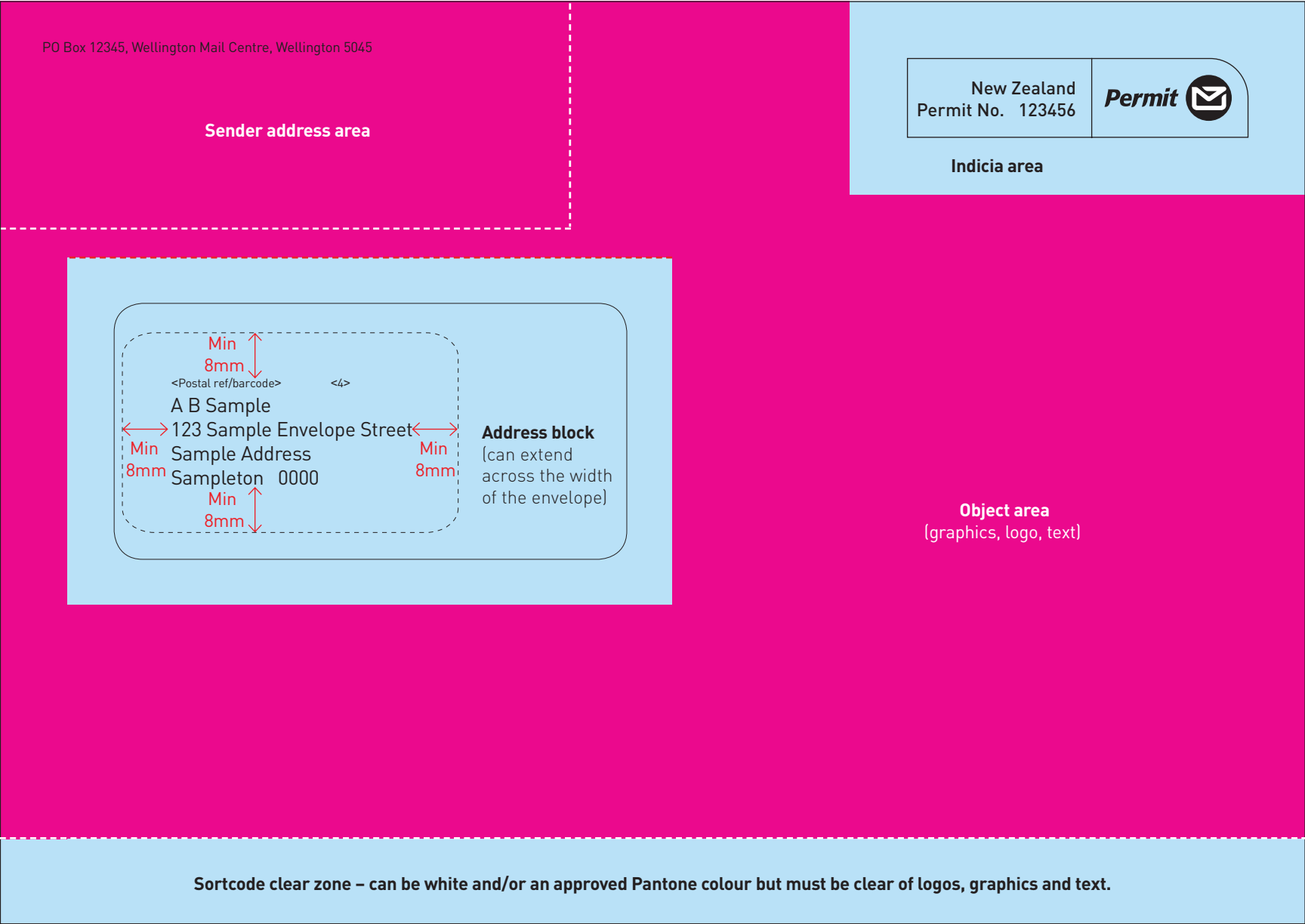


Front of C5 – colour guide

(diagram shown at 100%)

= any colour can be used in this area

= only approved Pantone colours or white can be used in this area



1.3 Mail piece construction and materials

Mail piece dimensions

Mail pieces must be rectangular with an aspect ratio¹ of 1.4–2.6. To ensure your mail piece can be machine-sorted, its dimensions must be:

	Minimum	Maximum
Height	88mm	165mm
Length	138mm	240mm
Thickness	0.15mm	6mm
Weight		50g

Mail piece construction and envelope weight

The minimum paper weight for machineable envelopes is 70gsm.

Postcards

To machine-sort postcards, they must fall within the above range, and have a paper weight range between 155gsm and 230gsm. We recommend using 230gsm to minimise the potential for damage. You need to make sure that the side of the postcard on which the delivery address and PermitPost impression or FreePost indicia are printed, complies with all the envelope layout specifications set out in these standards.

Self mailers

Folded self mailers (i.e. mail pieces made from a folded single sheet of paper) and other similarly built mail pieces must be fully sealed with gum, tape or glue all the way around the mail piece. Clasps, buttons, string, staples, glue dots and similar devices are not compatible with the machines and cannot be used. The paper weight for self mailers needs to be at least 70gsm.

Paper type and sealing methods

The paper used for the envelope (and the insert if using window envelopes) must be opaque or dense enough to prevent any printing or graphics from the inside of the mail piece clearly showing through.

Envelope paper must:

- be constructed of paper only and not be synthetic
- not be phosphorescent
- be suitable for ink to dry in less than a second
- have a matt finish

Kraft envelopes and recycled paper are acceptable paper types for machinable mail products.

Paper containing dark fibres, background patterns or textures is not suitable.

Incompatible paper types include:

- polywrap
- shrinkwrap
- spunbonded olefin (sheet product made of high-density polyethylene fibres)
- silver foil
- flow wrap
- any material containing metal

Mail pieces must not be sealed using clasps, buttons, string, staples, glue dots or similar devices.

Inserts

Mail pieces must not contain magnetic items or items causing an uneven thickness, such as pens, paperclips, pencils and loose keys or coins. This includes product samples (e.g. of food, toiletries or household products) as they cause uneven surfaces and pose a risk to the machine and the mail piece itself should any breakages occur (for full details, refer to the list of Prohibited items online at www.nzpost.co.nz/terms).

¹ To determine the aspect ratio, divide the envelope length by its height.

Mail piece construction and materials continued

Envelopes, insert material and address labels

The envelope, visible insert material (if using window envelopes) and address labels must be white and/or an approved Pantone colour in all clear zones (see section 1.2). This is to ensure there is sufficient contrast between the background and the text/graphics.

Outside these areas, non-approved Pantone colours may be used.

Acceptable Pantone colours

The acceptable range of Pantone colours for machineable mail is shown below. Key points to note are:

1. The actual colours shown below are approximate representations only
2. Acceptable Pantone colours can be created as solid pantone colour or replicated out of CMYK
3. Screens of acceptable Pantone colours are also acceptable as this will result in a lighter colour (and therefore greater contrast) than the approved Pantone colours
4. In addition to the acceptable Pantone colours, CMYK colours with a black component of less than 30% may also be acceptable. We will need to assess and approve these envelope designs on a case by case basis
5. If printing on coloured envelope stock, the resulting colour in the sortcode clear zone must not be darker than the acceptable Pantone colours.

Multiple window envelopes

Multiple windows can be included on the envelope providing they do not conflict with the clear zones or contain information that may be interpreted as an address.

Window covering

The window must be transparent and the address characters must be clearly visible through it. Window coverings must be tight and free of any wrinkles, streaks, fogging or colour. Open windows are not permitted.

Gloss/shine

The envelope material must be matt and non-reflective. Glossy or shiny materials are not compatible with our sorting machines.

Mail piece flexibility

The mail piece must be flexible enough to go through the sorting machine without damaging the mail piece or the machine. As a guide, the mail piece and its contents must be easily bent evenly around a 280mm diameter circular surface.

120	127	128	134	135	141	148
149	155	162	169	196	203	250
277	290	304	317	331	332	337
344	351	358	365	366	373	386
393	400	406	413	427	434	441
453	454	461	467	468	474	475
482	488	489	496	502	503	510
524	530	531	538	545	552	559
566	573	579	580	586		

1.4 Address printing

The table below shows the current list of machine readable fonts:

Arial	123456789 ABCDEFGHI abcdefghi
Arial Narrow	123456789 ABCDEFGHI abcdefghi
Bookman Old Style	123456789 ABCDEFGHI abcdefghi
Century	123456789 ABCDEFGHI abcdefghi
Century Oldest	123456789 ABCDEFGHI abcdefghi
Courier New	123456789 ABCDEFGHI abcdefghi
Gothic 720	123456789 ABCDEFGHI abcdefghi
StoneSans	123456789 ABCDEFGHI abcdefghi
Times New Roman	123456789 ABCDEFGHI abcdefghi
Trade Gothic	123456789 ABCDEFGHI abcdefghi
Helvetica	123456789 ABCDEFGHI abcdefghi
Letter Gothic	123456789 ABCDEFGHI abcdefghi
Verdana	123456789 ABCDEFGHI abcdefghi

Fonts

Please use only laser or inkjet print – dot matrix print cannot be read reliably by our machines. Characters must be clear and well defined.

Font style

Do not use the styles below (or other highly ornamental/stylised versions of the fonts shown on the left):

- **Bold**
- Underlined
- *Italic.*

Upper case must be used for the first letter of each word and the remaining letters can be written in all upper or all lower case.

Font size

The font size of the entire delivery address must be between 9pt and 12pt.

- 9 pt
- 10 pt
- 11 pt
- 12 pt

For more information about addressing layout standards, refer to our website at www.nzpost.co.nz/addressing.

Address printing continued

Font colour

Fonts must be in black or dark blue (see page 19 for approved Pantone colours).

Print quality

The characters forming the delivery address must be clean, sharp, dark and uniformly printed. The address must be printed clearly (i.e. dark text on a light background).

Left justification

The delivery address must be left justified.

Character spacing

There must be a minimum space of 0.3mm and a maximum space of 1.5mm between characters.

Word spacing

There must be at least one character space – and no more than two character spaces – between words/numbers. Make sure there is a maximum of two character spaces between the town/city and postcode.

Line spacing

There must be a minimum space of 0.8mm and a maximum space of 6mm between address lines. This spacing must be consistent between each of the address lines and the customer number and/or barcode if included.

Address characters

All address characters must appear in the window. The address block skew must be less than 5 degrees relative to the bottom edge of the mail piece.

Address labels

Address labels must be fastened securely. The address label skew must be less than 5 degrees relative to the bottom edge of the mail piece. All addressing information on the label must be legible and oriented to the longest edge of the mail piece.

Customer number and/or barcodes in the address block

In addition to the delivery address, the address block can also contain a customer number and/or barcode.

For window envelopes the location of the customer number and/or barcode needs to meet the following requirements to ensure it does not impact on the reading of the address:

- it must be on one single line on the line above the recipient name
- the line spacing must be consistent with the rest of the address
- wording needs to be printed in a font size of 8pt or less

- it can be left or right justified, but it cannot extend further than 100mm to the right of:
 - the left hand edge of the window, or
 - the left hand edge of the recipient address if this is printed onto the envelope

Alternatively, the barcode can be printed anywhere in the window, as long as it is more than 8mm away from the delivery address.

When you are printing directly onto an envelope or a label, the customer number and/or barcode requirements for window envelopes also applies (unless this is printed more than 8mm away from the perimeter of the address block).

Acceptable example with even line spacing

12345

Mr Joe Sample
123 Sample Boulevard
Sample Address
Sampleton 0000

Unacceptable example due to uneven line spacing

12345

Mr Joe Sample
123 Sample Boulevard
Sample Address
Sampleton 0000

1.5 Sender address area

All machinable mail items must include a sender address. This can be located on the front or the back of the envelope.

Sender address area – front

The sender address should include a postcode and must appear in the sender address/company logo area in the top left-hand corner of the mail piece. The sender address area is a maximum of 100mm length x 40mm height. For E8 envelopes, the maximum sender address area is smaller. Please refer to the diagram on page 10.

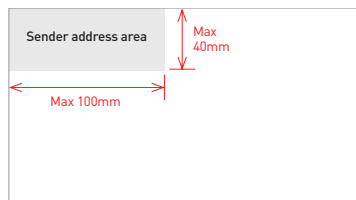


Diagram not to scale

To help prevent the sender address being read as the delivery address, the sender address must be printed on the envelope as follows:

- the sender address font size must be 8pt or less but still needs to be easily legible
- our preference is for this address to be written on one line
- if it is written over two lines a 'sender keyword' is required (please refer to 'sender keywords')

- the sender address needs to have commas separating the address lines
- the sender address area can also include graphics and logos.

Sender address area – back

The sender address can be located anywhere on the back of the envelope. It should include a postcode and can be written as a block or on one line with commas separating the address lines. The sender address font size must be 8pt or less.

Example 1: sender address written as one line

A B Sample, 123 Sample Street, Sample Address, Sampleton 0000

Example 2: sender address written as a block (with sender keyword)

- a) with sender keyword to left of the first line of the address

If undeliverable return to: A B Sample
123 Sample Street
Sample Address
Sampleton 0000

- b) with sender keyword immediately above the first line of the address

If undeliverable return to:
A B Sample
123 Sample Street
Sample Address
Sampleton 0000

Sender keywords

Sender keywords are specific words that are included at the beginning of a sender address. These enable the sorting machines to recognise this information as the sender address and minimise the possibility of the sender address being read as a delivery address.

Sender keywords need to be used when the:

1. sender address on the front of the envelope extends over more than one line, or
2. sender address is included on the reverse of the envelope.

Valid keywords are; **Sender, Return, From** and **Undeliverable** and can be used by themselves, in a combination or with other words. Common examples include:

- Return to sender:
- Return to:
- From:
- If undeliverable return to:

Sender keywords need to be located to the left or immediately above the first line of the sender address.

1.6 Indicia area

This section covers PermitPost impressions and Facia Indicia Marks (FIMs).

PermitPost impressions

PermitPost impressions must be located in the indicia area in the upper right-hand corner of the mail piece. There must be a clear zone of 5–10mm between the PermitPost impression and the top and right-hand edges of the envelope. PermitPost impressions must be overprinted onto the mail piece – labels or hand-stamped impressions are not acceptable.

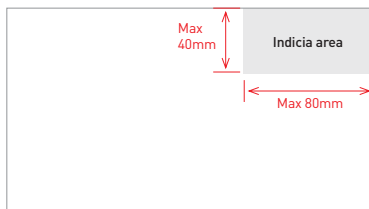
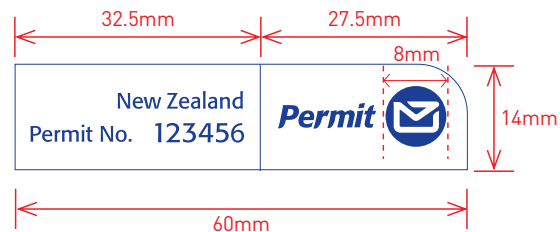


Diagram not to scale

- PermitPost impressions must be in approved black or dark blue Pantone colours.
- The font size of the PermitPost impression number must be 9pt.
- The PermitPost impression number must be a fixed sans serif font and cannot be in italics or bold.

- The left side of the PermitPost impression must include:
 - New Zealand
 - Permit No. [Permit Number].
- There must be a 3mm space between the words Permit No. and the PermitPost number.

A PDF of an approved Permit Post impression is available for you to download and use at www.nzpost.co.nz/permitpost. All you need to do is insert your allocated PermitPost number.



Approved Pantone colours for delivery addresses, PermitPost impressions and FIMs

072	2747
2757	2767
	Black

Standard and customised PermitPost impressions

Only approved standard PermitPost impressions with the above dimensions are acceptable for machinable mail. You can still use your company logo, which can be located in the sender address/company logo area or elsewhere on the mail piece (as long as the clear zone requirements are observed).

Indicia area for Approved FreePost envelopes

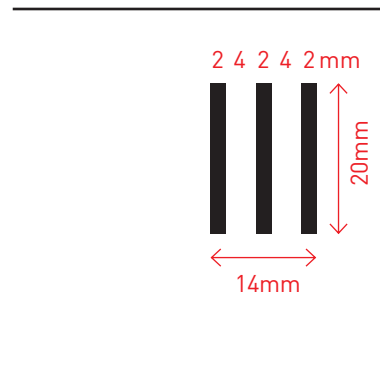
Facia Indicia Marks (FIM)

FIMs must be located within the indicia area.

A type 3 FIM is used on Approved FreePost envelopes.

- Each contrast bar must measure 20mm length x 2mm width.
- There must be a 4mm space between each contrast bar. The FIM skew must be 0 degrees relative to the bottom edge of the mail piece. There must be no other objects between the FIM bars.
- There must be a clearance of at least 10mm around the FIMs.
- FIMs can be black or dark blue (see page 19 for approved Pantone colours for PermitPost Indicias and FIMs).

Type 3 FIM for Approved FreePost



1.7 Approved FreePost

FreePost is a versatile, cost-effective service for businesses, organisations or individuals wanting to maximise the response rates to their mailings, advertising and direct marketing promotions. It's the mail version of a freephone number, enabling customers to contact businesses by mail free of charge. Approved FreePost is available for medium-sized, non-window envelopes only.



Key elements

- The minimum envelope size is 92mm high and 165mm long.
- Only non-window envelopes can be used for Approved FreePost.
- The FreePost Authority Number must be written on one line and located in the sender address/company logo area.
- Use approved Pantone black or dark blue type 3 FIM indicia (i.e. triple bars), FreePost and New Zealand Post button impressions (please refer to page 20).
- Address panel bar widths (i.e. the black bars located at each end of the envelope) must be a minimum of 2mm and a maximum of 5mm, and cannot extend into the indicia area.

Please see pages 22-23 for further information about layout. For more information on the FreePost service please refer to our website at www.nzpost.co.nz/freepost.

Non-window envelopes, FreePost DLE - colour guide

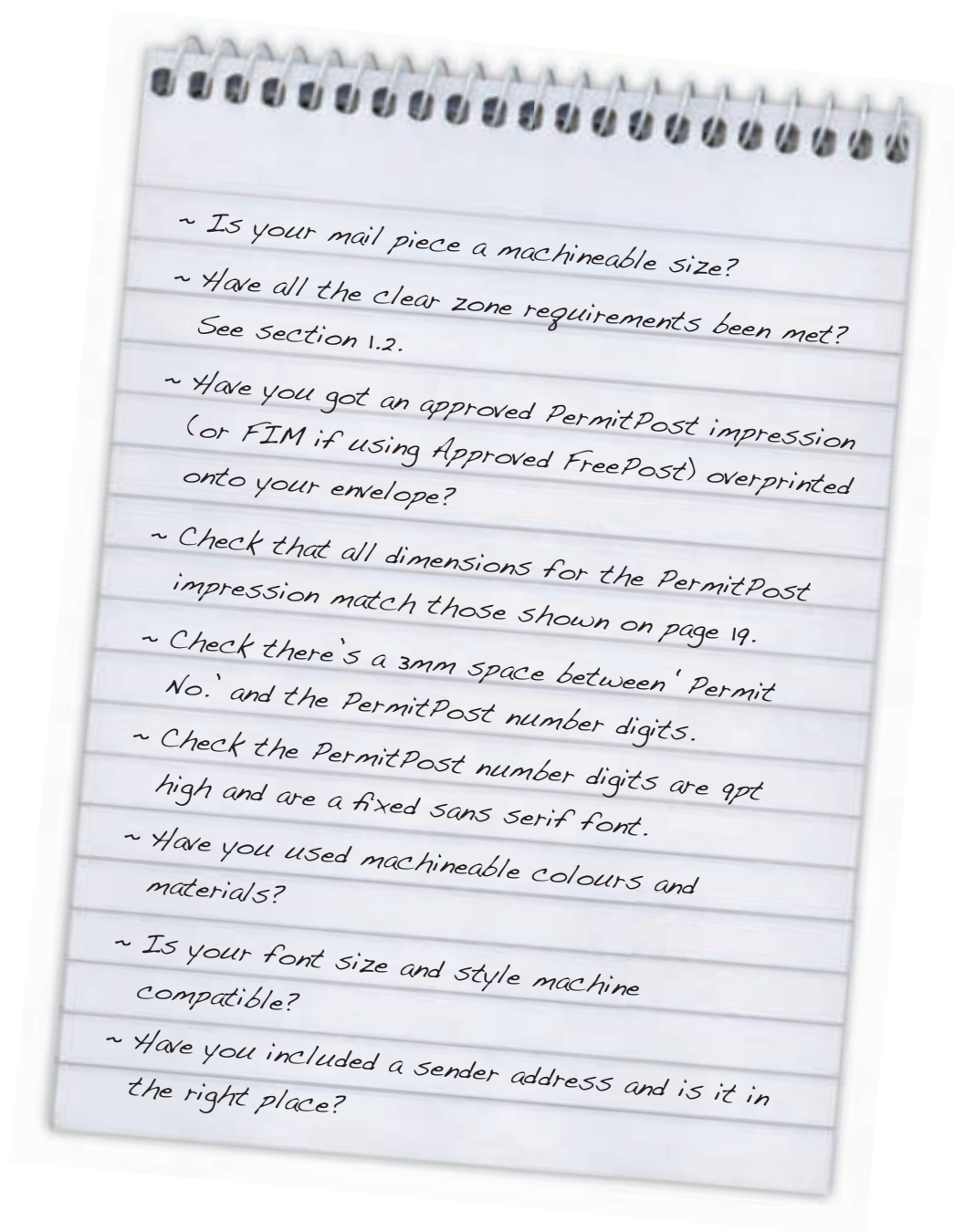
(diagram shown at 100%)

 = any colour can be used in this area  = only approved Pantone colours or white can be used in this area



Checklist

Before going to print, please use the following checklist to make sure you've met all the requirements. If you have any questions, please contact your account manager, call our customer service centre on **0800 501 501**, or email us at envelopelayouts@nzpost.co.nz.



Glossary

Term	Description
Address block skew	The angle of the address text in relation to the bottom edge of the envelope.
Aspect ratio	The length-to-height ratio of the mail piece. To determine the aspect ratio, divide the envelope length by its height.
Character spacing	The horizontal clear spacing between each address character.
Character stroke width	The width of the line or lines that form each address character.
Clear zone	Designated white and/or approved Pantone colour areas of the mail piece.
Facia Indicia Mark (FIM)	Machine-detectable indicia used to face and cancel letters automatically. The FIM can also be used for automatically separating and sorting different letter products.
Line spacing	The clear, vertical space between the lines of an address.
Machine-sorted	In these standards, the term machine-sorted refers to our ability to machine sort VolumePost 1, VolumePost 3 and Business Standard mail to a high level of accuracy.
Sortcode and sortcode clear zone	Contained within the machine applied barcode located in the sortcode clear zone (i.e the 15mm high strip along the bottom of the envelope). This barcode is made up of approx. 35 characters of information including a sortcode, read by the sorting machine to determine where to sort the mail item to.
Word spacing	The horizontal clear spacing between words in an address.

Contacts

For further information, please visit our website www.nzpost.co.nz, email envelopelayouts@nzpost.co.nz, or call our Customer Service Centre on **0800 501 501**.

This guide is correct at the time of going to press and is subject to change. The standard terms and conditions of the products and services offered by New Zealand Post Limited, including information on the extent of our liability, are set out in the Public Contract and the Postal Users' Guide. These are available for reference at PostShop™ stores and selected New Zealand Post retail outlets, or can be viewed on our website www.nzpost.co.nz/terms. Other conditions for New Zealand Post Account customers are contained in the terms and conditions provided when credit was arranged. New Zealand Post reserves the right to change the product specifications. VolumePost™, FreePost™, PermitPost™ and PostShop™ are trade marks of New Zealand Post Limited.