

# Printing envelopes with ConT<sub>E</sub>Xt

## (example for using layers)

### Abstract

Once in a while one has to prepare an envelope with printed address based on the guidelines provided by the Dutch mail service TNT. This short communication shows a way to achieve this with ConT<sub>E</sub>Xt. The article shows the solution for the DL-type of envelope. From there, it is a small step to define other envelopes with different dimensions.

### Keywords

Maps, Context, layer, envelope

### Introduction

Sometimes one needs envelopes, which carry a printed address and also the address of the sender. In Europe there are a series of well-known sizes of envelopes. In order to be able to print on these envelopes one needs to make preparations. Furthermore the mail services want to process the envelopes automatically. Hence they give guidelines, where to put the information. In the following I would like to present you my solution to printing envelopes.

### Envelope Sizes

There are different series of envelopes derived from the DIN paper sizes. Commonly one uses the C-series, however there is also a B-series which is slightly bigger than the C-series.

C-series	B-series		
C6	114×162	B6	125×176
C5	162×229	B5	176×250
C4	229×324	B4	250×353

Another envelope is called DL which is very often used in business-environments. The width is 220mm and its height is 112mm. The information contained in this section comes from [http://en.wikipedia.org/wiki/Envelope\\_size](http://en.wikipedia.org/wiki/Envelope_size).

### Mail Service Requirements

The mail service provides you with guidelines in order to set up envelopes, which can be machine-read and automatically sorted for distribution. The Dutch mail service TNT provides the following instruction for automatically processed mail. The data is based on a brochure downloadable from <http://www.tntpost.nl/zakelijk/aanvragen-bestellen/index.aspx>. The dimensions are valid for mail with dimensions less than 265 × 380 × 32mm and less than 3kg of weight. The main areas are indicated on the following figure. It is advised to place the receiver's address centered in the receiver's address area.

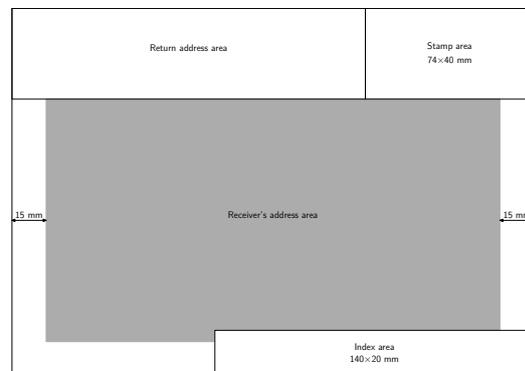


Figure 1. envelope C5 landscape

In the case of a portrait sized envelope the dimensions of the different areas remain the same, however the index area is rotated and adjusted to the lower left corner of the envelope.

C4-envelopes and larger envelopes have a different size and placement of the index area. The size is 100 × 30mm. In case of a landscape oriented envelope, this area is placed vertically (rotated) and down in the left corner. Otherwise the area is placed horizontally at the lower right corner.

For the postcard there is a different set of guidelines, though the basic dimensions of the areas do not differ from normal envelopes.

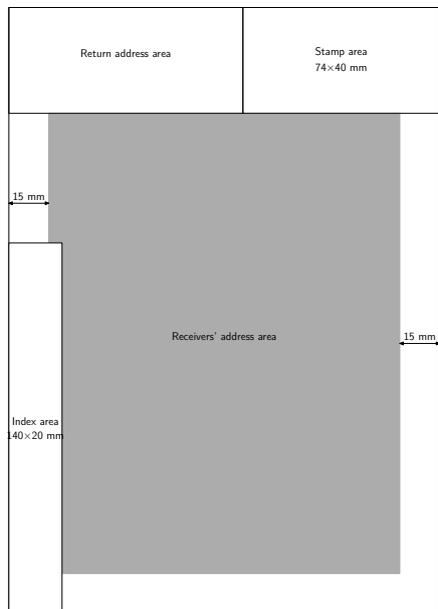


Figure 2. envelope C5 portrait

Remarkable is the size of the index area on a small postcard of  $150 \times 105$ mm. The receiver's address area must be at least 74mm wide, which is the width of the stamp area. The receiver's address area is separated from the text area by a vertical bar. The thickness of the this bar should be no less than 1.2mm.

## Setting up the Envelope

First we need to define the size of the envelope. The most commonly used sizes are predefined in ConTeXt.

– For this example we define a new size.

```
\definepapersize [DL] [height=112mm,width=220mm]
\setuppapersize [DL] [DL]
```

Later on we want to place blocks of information on this paper-size. In order to have the freedom to move these blocks to a specified position we define a layer, which covers the whole paper-size.

```
\definelaye
[Envelope]
[width=\paperwidth,height=\paperheight]
```

Basically we need to place two information-blocks, one containing the address of the recipient and the other containing the address of the sender. In the sender's information one will probably want to place a logo e.g. if the envelope is sent by the secretary of an association or a company. We put both information-blocks into buffers.

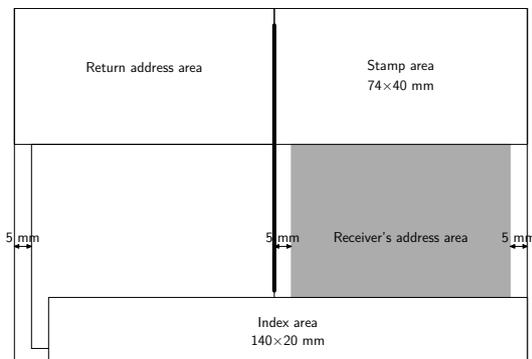


Figure 3. Postcard

```
\startbuffer [Sender]
\startlines
W. Egger
Maasstraat 2
5836 BB~{\sc Sambeek}
\stoptlines
\stopbuffer

\startbuffer [Receiver]
\startlines
NTG-secretary
Maasstraat 2
5836 BB~{\sc Sambeek}
\stoptlines
\stopbuffer
```

Now we can place the buffers on the already defined layer. The sender's address is placed near the upper left corner.

It is advised to put the receiver's address centered in the receiver's address area. Anyhow, it is always placed in such a way, that a minimum of 20mm or 30mm respectively white space remains for the index area at the bottom and that the address-block honors at least 15mm or 20mm respectively of white space as the right margin. For postcards the right margin is 5mm.

```
\setlayer
[Envelope]
[preset=rightbottom,
location={left,top},y=2.7cm]
{\framedtext [frame=off]
{\getbuffer [Receiver]}}
\setlayer
[Envelope]
[preset=lefttop,
location={right,bottom},x=1cm]
{\framedtext [frame=off]
{\getbuffer [Sender]}}
```

Now that the information has got its place, the only thing to do yet is typesetting the layer on the paper.

```
\starttext
\placelayer [Envelope]
\stoptext
```

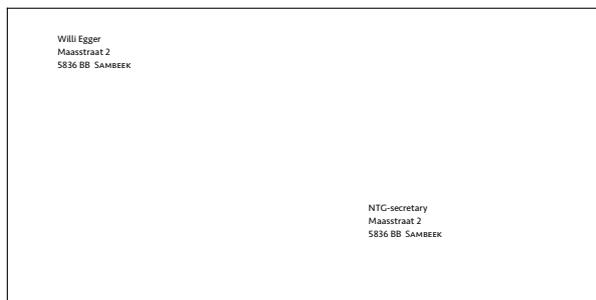


Figure 4. DL envelope

## Handling other Envelope Sizes

For handling different envelope sizes in the same file, *modes* come in handy.

For each envelope size we prepare the setup in a mode-paragraph.

```
\startmode [DL-envelope]
\definepapersize
[DL] [height=112mm,width=220mm]
\setuppapersize
[DL] [DL]
\definelaye
[Envelope]
[width=\paperwidth,height=\paperheight]
\stopmode
```

Another envelope definition might look as follows:

```
\startmode [C5-envelope]
\setuppapersize
[C5,landscape] [C5,landscape]
\definelaye
[Envelope]
[width=\paperwidth,height=\paperheight]
\stopmode
```

In the preamble you can enable the desired mode with

```
\enablemode [DL-envelope]
```

Of course the information placed on the layer will have different distances from the edges in each case. To solve this problem we set up the above mentioned `\setlayer`-block for each of the defined envelopes. In order to let ConT<sub>E</sub>Xt know which of the definitions to use, we test on the enabled mode.

```
\doifmode [DL-envelope] {...\setlayer-block...}
```

In case of multiple definitions for different envelope sizes and different setups for the sender's address, it is worthwhile to put the static part of the information into a separate file. This file I usually call "layout.tex". – In the file, where the actual typeset-information is stored, I have a list of all the modes which can be enabled. All but one of those rows are commented out.

```
\enablemode [DL-envelope]
% \enablemode [C5-envelope]
\environment layout
```



Figure 5. C5 envelope

## Conclusion

Printing an envelope is not an easy task. Thanks to the flexible possibilities in ConT<sub>E</sub>Xt with layers, this becomes an easy game. Defining the different sizes and layouts is always worth the invested time, because you will have perfect prints and most important always a consistent layout. Last but not least the mail service will appreciate a layout complying with their guidelines.

Willi Egger  
w.egger@boede.nl