

The production of plastic cards is a collaborative process in which the preparation of your files is of great importance. Before you start designing your cards, you should familiarize yourself with the specifications described below. Knowing the specifications will save you a lot of time in communication and file transfer.

## 1. ATTRIBUTES OF THE CARD

Dimensions of the card.

After cutting.

The size is 85.7 x 53.9 mm and the Corner radius 3 mm.

print area. The print area of the files must be 2 mm larger on each side (89.7 x 57.9 mm).

magnetic stripes. The magnetic stripe is 12.7mm wide if needed and 4 mm from the edge of the card. **CARD DESIGN**

### 1. Scale.

Always design your map in the scale (1: 1).

### 2. Vector graphics.

If possible, use vector graphics instead of pixellated images. This is important!



Always convert fonts to curves.

- raster images.

**RESOLUTION.**

*There is a myth that "when the resolution is high, the image quality is high," that's not always true.*

*The quality depends on many properties such as brightness, contrast, color dynamics, color balance, type of media used and many others.*

*The optimal resolution for us in dry offset printing on PVC is 400 dpi for CMYK images and 800-1200 dpi for monochrome images.*

**DO NOT interpolate lower resolutions to recommended values! This never leads to acceptable ones Results!**

**DO NOT CREATE files that are larger than necessary!**

## COLOR MODELS. COLOURS.

Color model.

The card design is made with CMYK colors. Files with RGB colors are sent back to the client for re-creation.

Color profile.

If you use additional colors, they must be added with PANTONE Coated as special colors! (Pantone C) scale.



**Colors set with Pantone, which are printed with process inks, are converted into PANTONE color bridge CMYK EC !!!**

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The metallic colors set by the PANTONE scale (from Pantone 871 C to Pantone 8281) CANNOT be used. If there is gold, silver, or any other metallic color, please call us so we can work out the specifications needed to achieve the desired result. Color specifications.



If you want to get a really dense black color, use the values C100 / M90 / Y90 / K100.

For more information, please contact our specialists. This type of advice is particularly important if you want to print on a silver or gold screen printed background.

### 3. PERSONALIZATION

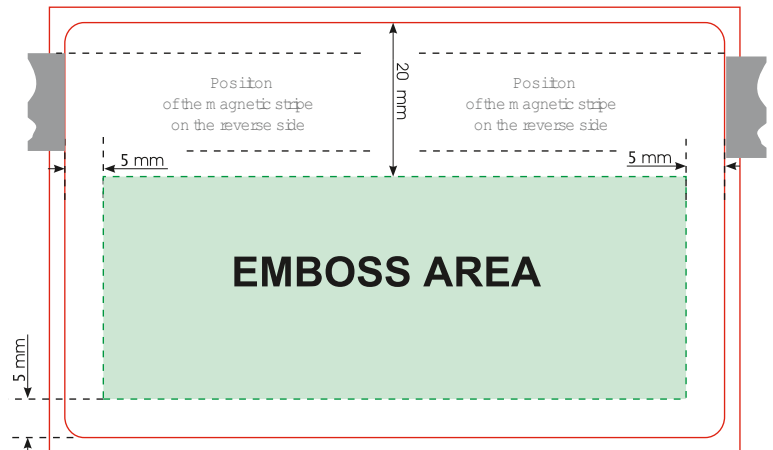
Personalization with embossed letters (Embossed). Requirements for embossing:

1. The embossing field must be 5 mm measured from the left, right or bottom edge of the card and 20 mm from the top edge.
2. The embossing font is fixed and cannot be changed. Among the popular true-type fonts, OCR A Extended is the one that comes closest to the standard embossing machine used:

large numbers - 7cpi (characters per inch)  
small letters and numbers - 10cpi

3. Attention, there is no UPPER / lower case  
ONLY capital letters

4. The maximum number of symbols in a line (including spaces) is: 28 for 10 cpi letters, 20 for capital letters.
5. The minimum distance between the rows is 2 mm.
6. The colors for the embossing can be: silver, gold, black or white. If you have an embossed print, it must match the back of the card.



Signs leave a mirror print on the back of the card.

*If there is an embossing, the magnetic stripe cannot be at the bottom of the card! Contactless RFID cards cannot be stamped!*



#### Personalization with thermal printing.

There are no restrictions on the fonts used when personalizing with thermal printing, except for the size of the

Font - This must be at least 5 pt. If you use a non-standard font, you must include the font file with the data delivery.

Barcode.

Please note the following when printing barcodes:

Specify barcode type, what type of barcode you need.

*Barcode data submitted by you must comply with the specification (e.g. EAN13 is required for 12 digits, the last one (13th)*

a control number and a check digit is required, which is automatically generated for EAN8 numbers are required 7)

The field used for barcode printing must be white (or a very light color) in order to be able to offer the contrast required for barcode readers.

## plastic card production

-The field used for the barcode. The print must be large enough.

For example:

EAN 13 field must have a width of at least 35 mm

*EAN 8 field must have a width of at least 25 mm.*



Always ask us about the size of the Barcodes to a possible revision of the Avoid designs!

### Magnetic stripe and coding.

The magnetic stripe has a strong fixed position: 4 mm from the top or bottom edge in the longitudinal direction  
Card embossing must NOT lie over the magnetic stripe.

The magnetic stripe has 3 tracks for coding data (ISO 4909). - It is necessary to provide us with the information that you want to write on the tracks.

The magnetic strips are supplied in two qualities: they are LOCO 300 Oested

The magnetic stripe can be LoCo brown, LoCo black, HiCo black, HiCo gold and HiCosilver.

## 4. PERFORATION AND PUNCHING

Perforation

Perforation is drilled on the card



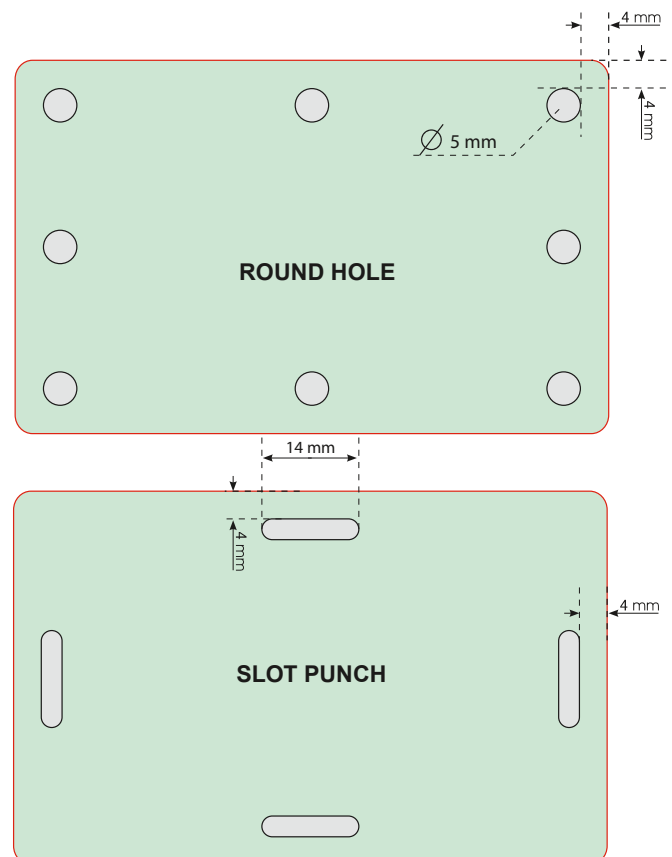
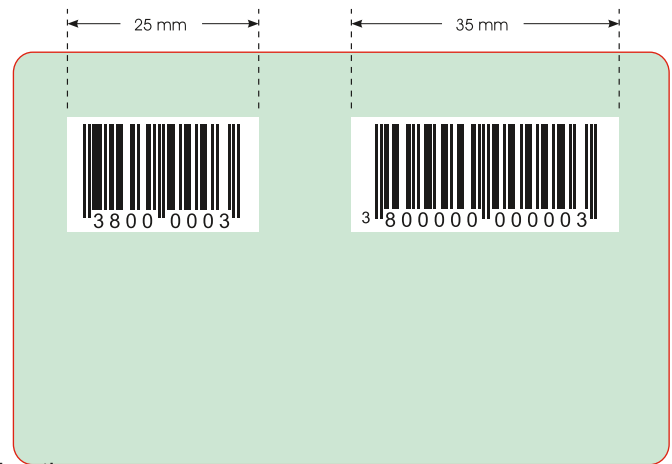
*suitable dimensions and position as shown on the right.*

*If necessary, all holes in the card or combinations thereof can be made.  
It is also possible to punch on plastic card production other than those specified (user-defined size and position), but the position and size of the irregular perforation must be specified further.*

*It should be noted that the contactless chip cards can only be perforated at certain points in order to avoid interference with the antenna, which is necessary for the chip to function. This depends on the respective model chip.*



Contact our staff for more information on punching contactless cards.



### 5. Punching

#### MINI VISA

Small Mini Visa cards are part of a larger card standard ISO CR-80 with a thickness of 0.76 mm and can be provided with a magnetic stripe according to customer requirements. Mini cards work with all devices for reading and writing magnetic stripe cards, except ATMs.

#### THREE KEY TAG

The three-key tag card is a standard ISO-CR-80 card with a thickness of 0.76 mm, which is divided into three smaller cards with the option of a hole in a corner. Three key rings cannot have a contactless chip or a magnetic stripe. The thickness of the card and the mini visa must not exceed 0.76 mm.

### 6. HOT EMBOSING

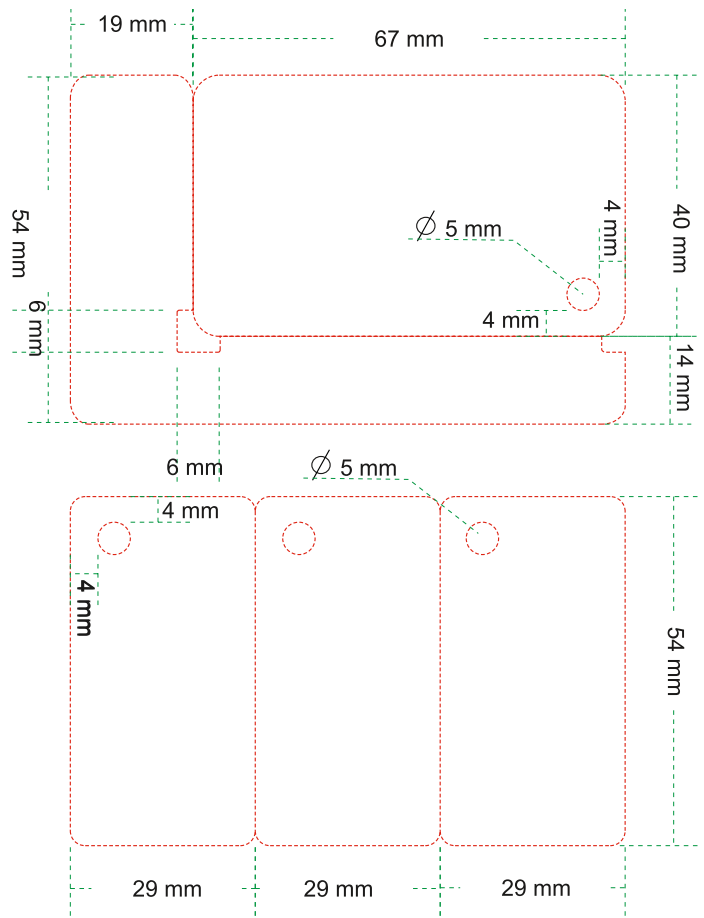
This is a method of applying one Metal foil or other type of foil on the Map using pressure and temperature. In contrast to thermal printing (printer), the applied hot stamping enters the laminate structure, which determines the high resistance to mechanical damage.

#### Types of hot stamping:

metal foil (gold, silver, etc.).

With colored foils (black, red, white, etc.).

With holographic foils. We have a large selection of holographic films as well as the usual hologram clichés  
Signature field (white, security white, spider web)



### 7. SOFTWARE PRODUCTS AND FILE FORMATS (EXTENSIONS)

The card design described so far can also be created

Software products listed below:

#### - Adobe Illustrator from CS 5.5

This is the preferred format for us.

All fonts have to be converted into curves.

All images must be contained in the file, NOT linked to external files.

All effects and transparencies must be simplified with EXPAND APPEARANCE and FLATTEN TRANSPARENCY.

#### - Adobe Photoshop from CS 5.5

The files can be saved in TIFF or PSD format.

#### - Corel Draw from X5

All fonts must be converted to curves.



*Die Dateien werden zur erneuten Erstellung an den Kunden zurückgesandt, wenn sie einen der oben aufgeführten Mängel enthalten! Dateien, die mit ähnlichen Produkten von MS Word, Excel und PowerPoint erstellt wurden, sind NICHT zulässig!*