




FACTORY

INSTRUCTIONS  
FOR PREPARING FILES  
FOR PRINTING

v. 2023

 It is the responsibility of the Ordering Party to send the appropriate production files (in print quality) to the printing house, thoroughly checked and already approved for production by the publisher. On the other hand, Trefl Factory expects the Ordering Party to provide the project in the form in which it should be printed. Changes in the specification of the ordered product may delay the production date and generate additional costs (recalculation of the price). Graphic files are prepared by the Ordering Party on templates sent by Trefl Factory. Files prepared on other templates will be sent back for correction. The files are checked for the correctness of markings on the product, compliance with the order, and preparation for offset printing according to the guidelines described in this manual. When the files are correct, Trefl Factory sends back to the Ordering Party a set of production files, i.e. exactly the same ones that will be transferred to the printing house (high resolution graphics, final colors and dimensions). Production will take place after receiving a clear and unambiguous acceptance of the Ordering Party. Trefl Factory does not take responsibility for incorrectly accepted files.

## Rules for preparing PDF files

- The acceptable file format is PDF in the **PDF/X** standard (**PDF/X-3 or PDF/X-4**). We do not recommend saving to PDF/X-1a (does not support transparency). When saving to PDF/X, use a default compression JPEG, with an Image Quality of Maximum, or ZIP.
  - Graphics should be prepared in CMYK colors. Additional Pantone colors are possible, but the number of colors must be in accordance with the order. Graphics in RGB colors will be sent back for correction.
  - Templates should be vector objects, set as a spot color (color separation other than CMYK), and the color should be overprinted.
  - Additional elements (UV varnish, hot stamping) should be set as black color (100%K).
  - The optimal resolution of bitmap graphics is 300-350 ppi, minimum 200 ppi (depends individually on the graphics).
  - Fonts should be embedded in the PDF file (this is allowed by **PDF/X**). It is not recommended to outline fonts unless the license does not allow it. Fonts should not be rasterized either. This can result in poor print quality.
  - All black elements (100%K) will be overprinted automatically (fonts, outlines).
  - **It is unacceptable to overprint white and other colors than 100%K and Pantone.**
  - The minimum line thickness in printing is 0.15 pt.
  - Each page of the PDF file must have a correctly defined trim box (final cropping size) and bleed box (size increased by bleeds).
  - The artwork must be centered on the trim box and bleed box.
  - **Bleeds** apply to all printed components: **3 mm** (manuals, brochures, playing cards, banknotes, rigid boxes, extra posters), **5 mm** (puzzle images, playboards, box inserts, punchboards, screens, etc.). In case of doubt about which bleed should be used, 5 mm will be optimal (the bleed may be larger, but not less than 3 mm).
  - Safe margin applies to all components and should be 5 mm inward for puzzles and playboards, and 3 mm inward for all other components. It specifies the minimum safe distance for placing any important graphic elements from the edge (copyright sign on puzzles, painter's signature, etc.).
  - Instructions, brochures, booklets with the cover should be included in one file in order from the first to the last page. Pages should not be sent as spreads. The pages are combined into spreads by the printing house.
- Instructions over 4 pages should include pagination.**

Before submitting files to Trefl Factory, you should check the following:

**color separation preview** – if the colors separate incorrectly, the files will be sent back for correction  
**bleeds** – in the case of missing bleeds, the files will be sent back for correction

If the size of the files allows, you can upload them attached to an e-mail. Larger files can be uploaded via:

**ftp.trefl.com**  
login: trefl.factory  
hasło: TREFL2018

**wetransfer.com**  
**drive.google.com**  
...

## Color management - ICC profiles

ICC (International Color Consortium) colour profiles ensure a consistent and predictable print result on different types of paper. They are compatible with Windows, Mac OS and any other standard operating system. However, ICC profiles are usually not installed on your computer by default so you have to do this manually.

The ICC profiles can be downloaded for free. Go to [eci.org/en/downloads](http://eci.org/en/downloads), scroll to the section ICC profiles from ECI (old versions) and download the **eci\_offset\_2009.zip** file. You should install and then embed in your layout program the following ICC profiles:

**ISOcoated\_v2\_eci.icc**

**ISOcoated\_v2\_300\_eci.icc** \*(optional if there are playing cards in your product)

More about the installation and embedding of the profile in the instructions at the link:

[www.onlineprinters.co.uk/magazine/installing-icc-profiles-indesign-photoshop/#1b-farbprofile-installieren-alt](http://www.onlineprinters.co.uk/magazine/installing-icc-profiles-indesign-photoshop/#1b-farbprofile-installieren-alt)

**Color saturation (the sum of the CMYK components) is 330% for ISO Coated v2 and 300% for ISO Coated v2 300%.**

Ustawienia kolorów

Brak zsynchronizacji: aplikacje z pakietu Creative Cloud nie zostały zsynchronizowane pod względem spójności koloru. Aby je zsynchronizować, należy wybrać Ustawienia kolorów pakietu w programie Bridge.

OK  
Anuluj  
Wczytaj...  
Zapisz...

Ustawienia: Własny

Tryb zaawansowany

Przestrzeń robocza

RGB: sRGB IEC61966-2.1

CMYK: ISO Coated v2 (ECI)

Zasady zarządzania kolorami

RGB: Zachowaj osadzone profile

CMYK: Zachowaj wartości liczbowe (ignoruj połączone profile)

Niezgodności profili:  Pytaj przy otwieraniu  
 Pytaj przy wklejaniu

Brakujące profile:  Pytaj przy otwieraniu

Opcje konwersji

Mechanizm: Adobe (ACE)

Metoda konwersji: Relatywna kolorymetryczna

Użyj kompensacji punktu czerni

Opis:

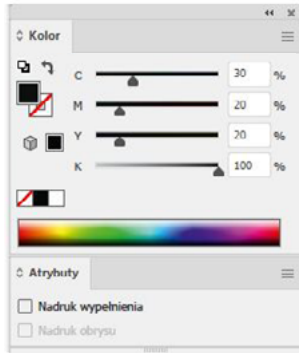
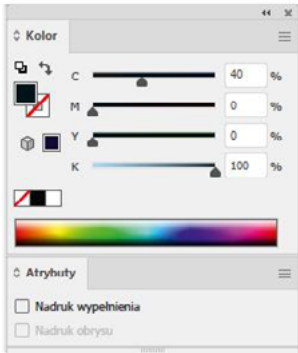
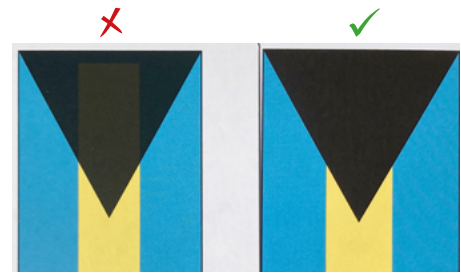
Określa profil modelu koloru, czyli to, jak wartości liczbowe kolorów przekładają się na ich wygląd. Ta przestrzeń robocza używana jest w dokumentach bez zarządzania kolorem oraz w nowo utworzonych dokumentach z zarządzaniem kolorem.

Before starting your project, set the recommended profile for the working space in your Adobe application. After installing the profile on your computer, go to the Color Settings tab. It will appear in the CMYK Working Spaces list, provided that you select the settings in **advanced mode**.

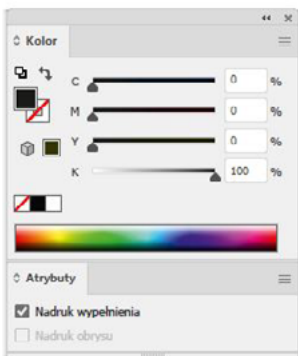
If you are concerned about the colors and quality of your graphics in print, we recommend ordering a **proof (digital proof)** from Trefl Factory. Such proof is used to assess the colors and resolution of the graphics. It is not used for checking texts, etc. As a standard, a printout is prepared from selected fragments of graphics. **The proof is printed on photo paper, not on the target paper. However, the final printing proceeds according to the proof.**



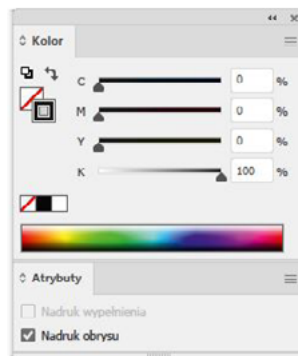
It is not without reason that black has the symbol **K** in the **CMYK** name - it is a **Key color**. In offset printing, black is very important and, in order to maintain control over its appearance, it is crucial that you check the color separation preview every time you upload files to printing house and make corrections to them.



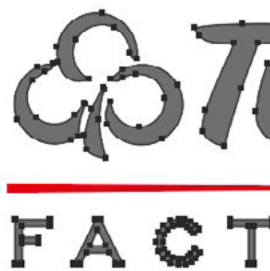
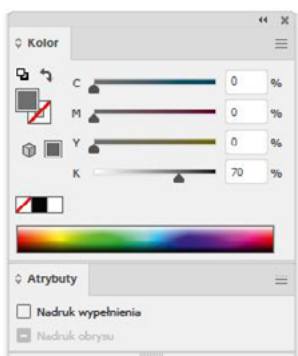
As above, the black ink may not be opaque enough to prevent the underlying ink colors from showing through. To eliminate the show-through problem, use rich black instead of 1-color black (100%K). For large solid black areas, use **40%C 100%K** (black in blue tint) or **30%C 20%M 20%Y 100%K** (neutral black).



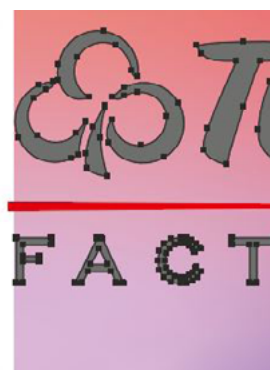
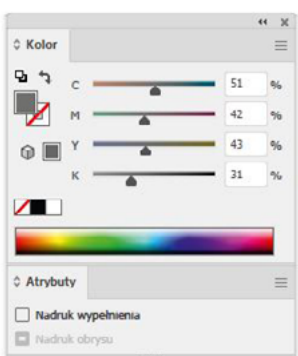
Small/thin black graphic elements and black texts should be made of 1 color (**100%K**) and have **Overprint Fill** selected in the Attributes panel.



Thin black lines, tables, and black outlines in the illustration should be made of 1 color (**100%K**) and have **Overprint Stroke** selected in the Attributes panel.



**Gray elements on a white background** should be made of 1 color (CMY-K).



**Gray elements on a colorful background** should be made of 4-color gray (**CMYK**), for example, 51%C 42%M 43%Y 31%K, instead of 70%K.

## Use of the Trefl Factory logo in custom-made products

**A manufacturer (publisher)** is any person who manufactures or has a product manufactured and markets that product under his own name or trademark.

The Customer may place the Trefl Factory logo on their product after prior consultation and provided that it is unambiguous who is who.

Manufactured **for**...  
(publisher's full name  
and mailing address)

Manufactured **by**...  
(Trefl Factory logo  
factory.trefl.com)

You are allowed to use the Trefl Factory logo on your product, provided that you follow the guidelines in the [Trefl Factory brand book](#).



You are not allowed to use the Trefl logo, which is reserved for Trefl brand products.



## Markings on the product

Trefl Factory verifies the markings on the product when checking the submitted files for printing. In the case of remarks, the publisher decides whether to comply with them or not. **The publisher as the owner is responsible for the product and its markings.**

## Markings required for specific product groups and age categories

Sometimes, producers are over-protecting themselves for fear that their toys will not meet the applicable requirements. So there are warnings about nonexistent hazards, e.g. about small elements that the toy does not contain. Over-warning is misleading and just as bad as no warning when the hazard exists. The warning should indicate a potential hazard to the life or health of the kid (swallowing is not hazardous, so such a warning is not correct). Similarly, you cannot use a CE mark on a product that is not classified as a toy, as this would be against the law.

kid card games	3+	CE	
adult games	14+		
frame puzzle, puzzle 24-30 pcs.	3+	CE	
puzzle 54-500 pcs.	3+	CE	
puzzle more than 500 pcs.	14+		*not obligatory
memory games, dominoes	2+	CE	
games containing small elements	3+	CE	

## Mark of compliance with the Toy Safety Directive

As for toys, CE is a mark confirming the product's compliance with the Toys Directive 2009/48/EC. A product will fall under the requirements of the directive if the manufacturer (publisher) considers it to be a toy. **A toy is a product designed or intended for play and one that, due to its properties or appearance, can be used for play by children (under 14 years of age).** Over 14 is an adult category.



**On request, you can get a Declaration of Conformity from Trefl Factory for all your custom products if they are classified as toys.** It is important to use the correct version of the CE mark in your project. The Chinese CE mark is not recognized in the EU because it is not supported by any test confirming the product's safety. It only means that the product comes from China.



Conformité Européenne



China Export

## Age warning


Some features of the toys may attract the attention of children under 3 years of age and therefore may pose a potential risk to younger children, even though they are intended for older children. If the toy contains small parts, the following information must be included on the packaging: **a warning, an indication of the presence of small parts and a graphic sign.** The warning and its content should be in the official languages of the countries to which the product will be sold.

**WARNING**






Not suitable for children under three years.\*





There is a risk of choking on small parts.

\* you can opt out of 'Not suitable for...'



minimum height 10 mm,  
shape and color cannot be modified,  
graphic symbol placed next to the warning text

= Not suitable for children under three years.

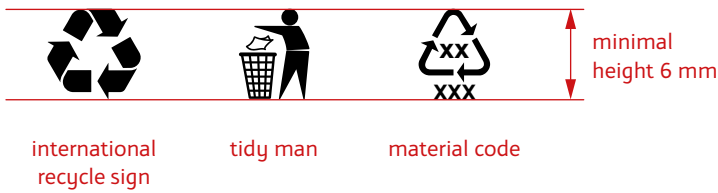
If the product is distributed to several countries, the 2-letter language code (suggested alphabetical order) should be included before the warning. **The two-letter country code is not always the same as the language code** (e.g. GB country code vs. EN language code, BE country code vs. FR, NL, DE language code).

DE	ACHTUNG	Nicht für Kinder unter drei Jahren geeignet. Erstickungsgefahr aufgrund verschluckbarer Kleinteile.
EN	WARNING	Not suitable for children under three years. There is a risk of choking on small parts.
ES	ADVERTENCIA	No conviene para niños menores de tres años. Existe riesgo de asfixia con elementos pequeños.
ET	HOIATUS	Ei ole sobiv alla kolmeaastastele lastele. Lämbumisoht väikeste elementide allaneelamisel.
FI	VAROITUS	Ei sovellu alle kolmivuotiaille. Sisältää pieniä osia. Tukehtumisvaara.
FR	ATTENTION	Ne convient pas aux enfants de moins de trois ans. Danger d'étouffement dû à la présence de petits éléments.
IT	AVVERTENZA	Non adatto a bambini di età inferiore a tre anni. Rischio di soffocamento con piccoli elementi.
NL	WAARSCHUWING	Niet geschikt voor kinderen jonger dan drie jaar. Gevaar voor verslikken in kleine elementen.
NO	ADVARSEL	Ikke for barn under 3 år. Små løse deler kan medføre en risiko for kvelning.
PL	OSTRZEŻENIE	Nieodpowiednie dla dzieci w wieku poniżej 3 lat. Istnieje ryzyko zadławienia się małymi elementami.
PT	ATENÇÃO	Contraindicado para crianças com menos de 3 anos. Existe o risco de asfixia com peças pequenas.
SV	VARNING	Inte lämplig för barn under tre år. Kvävningrisk, innehåller smådelar.

# Recycle marks

Waste and recycle markings may vary depending on the country where the product will be sold. Below are some examples of waste markings.

## EU:



## Italy:



near the signs, an Italian sentence should be placed  
(Plastic sorting. Paper sorting. Waste sorting. Check your municipality's regulations.)

If you are not sure what material code your product should be denoted, please ask. Example markings for puzzles in a rigid box:

shrink wrap      welded bag      box, puzzle

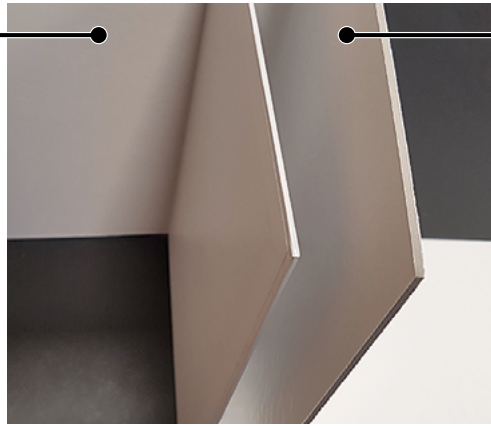
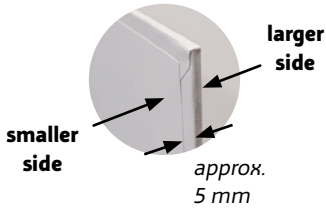
## France:

product solely intended for the French market	product intended for several markets (France/Abroad)
<p>length adjusted according to content</p> <p>16 mm</p> <p>13 mm minimum</p> <p>length adjustable to avoid splitting a long word</p>	<p>length adjusted according to content</p> <p>18.3 mm</p> <p>10 mm</p> <p>13 mm minimum</p> <p>length adjustable to avoid splitting a long word</p>
<p>in case of lack of space, you can opt out of the wording <b>le tri facile</b> (sorting made simpler)</p>	<p><b>country code</b> Flama Condensed Bold in capital letters (at least 5 pt)</p>
<p>9.75 mm</p> <p>13 mm</p> <p>13 mm</p> <p>pictogram + text      text only      pictogram only</p>	<p><b>packaging components</b> Helvetica Neue 77 Bold Condensed in capital letters (co najmniej 5 pt)</p>
<p>2 color versions of the sign are possible</p>	
<p>If the packaging includes 3 components or more, you are permitted to use the standard wording <b>packaging elements</b></p>	

# Playboards

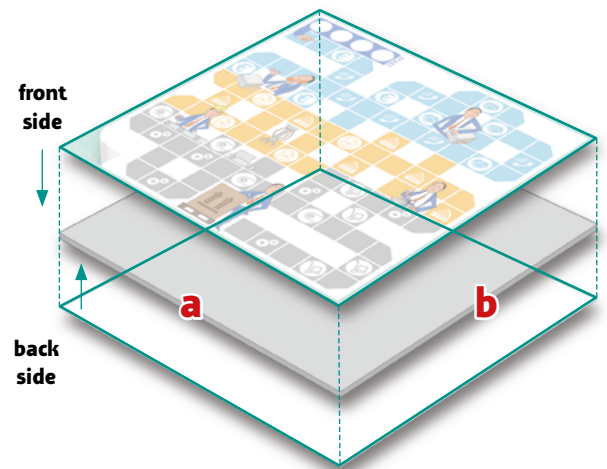
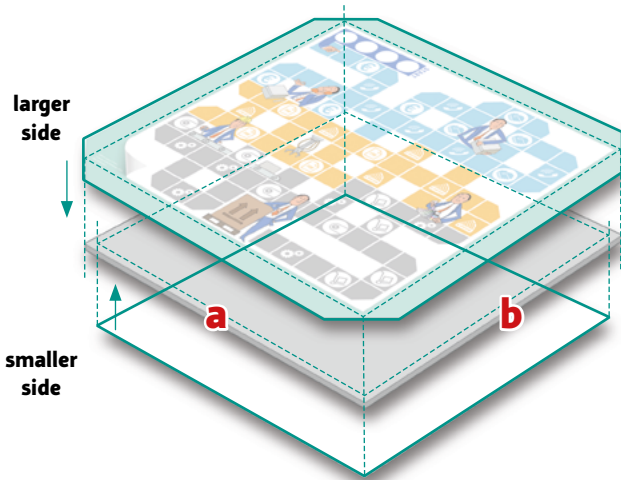
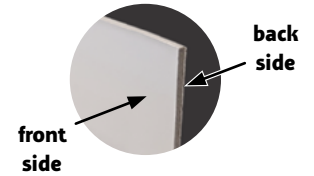
## board with covered edges

gray cardboard edges are invisible, this board consists of a smaller side and a larger side



## board with visible edges

gray cardboard edges are visible, this board consists of a front side and a back side



### board with covered edges (a × b)

#### larger side

net:  $(a + 35) \times (b + 35)$   
gross:  $(a + 45) \times (b + 45)$

#### smaller side

net:  $(a - 10) \times (b - 10)$   
gross:  $a \times b$

The net smaller side is even smaller than the playboard itself. This is important, for example, when there are fields of the same size on both sides of the playboard.

### board with visible edges (a × b)

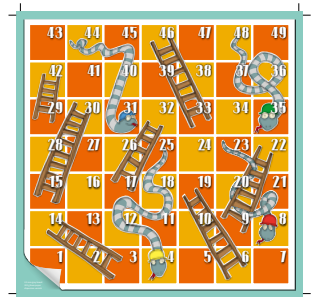
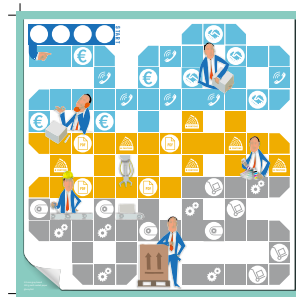
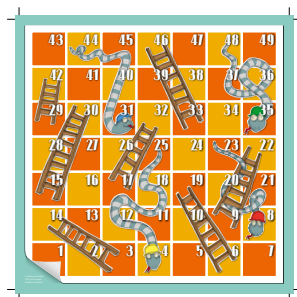
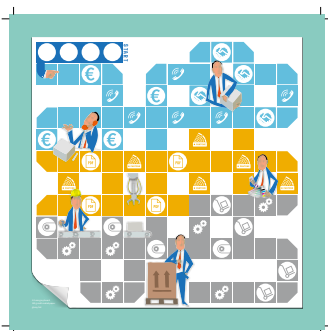
#### front side

net:  $a \times b$   
gross:  $(a + 10) \times (b + 10)$

#### back side

net:  $a \times b$   
gross:  $(a + 10) \times (b + 10)$

The front side is the same size as the back side.



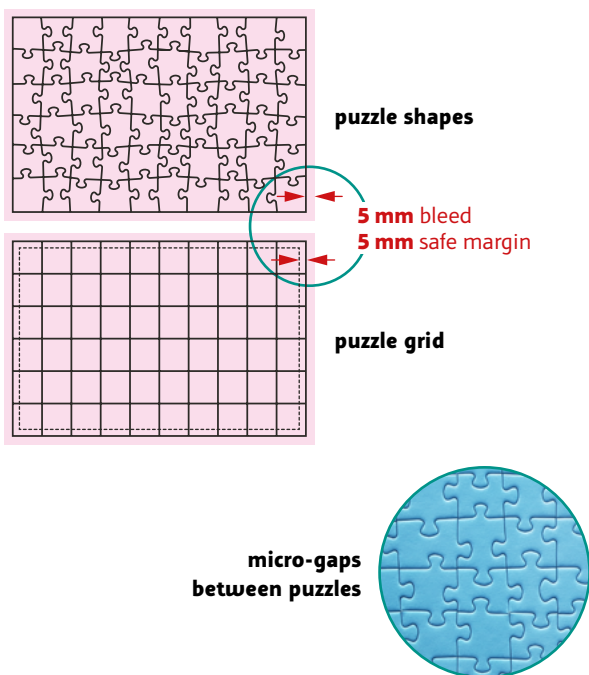


## Low-element and high-element puzzle

Placing puzzle shapes in the graphics is reasonable in the case of **low-element puzzles**. In this case, the imposition of puzzle shapes allows you to predict where the image will be cut into individual puzzle pieces.

In the case of **high-element puzzles**, the puzzle shapes are not needed. A puzzle grid may be available upon request. However, to design the graphics, the net and gross dimensions of the puzzle are sufficient.

In both cases, important graphic elements (copyright, logo, signature, etc.) should be moved away from the edge to a safe distance of **at least 5 mm**.

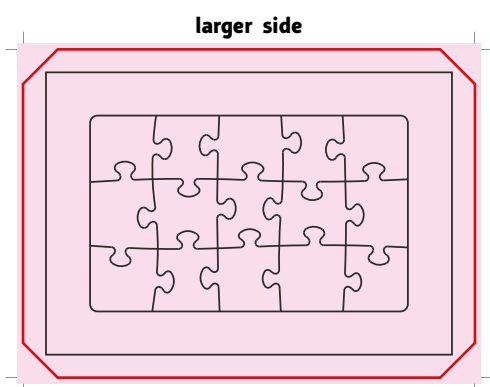


Note that the higher the number of puzzle pieces, the greater the difference between the net graphics and the dimension of the completed puzzle. This is due to the material working and micro-gaps between puzzle pieces.

number of puzzle pieces	net graphics	completed puzzle
260	<b>399 × 598</b>	<b>400 × 600</b>
500	<b>338 × 477</b>	<b>340 × 480</b>
1000	<b>480 × 680</b>	<b>480 × 683</b>
1000 panoramic	<b>339 × 967</b>	<b>340 × 970</b>
1500	<b>577 × 847</b>	<b>580 × 850</b>
2000	<b>680 × 959</b>	<b>682 × 961</b>
3000	<b>847 × 1155</b>	<b>850 × 1160</b>
6000	<b>953 × 1353</b>	<b>960 × 1360</b>

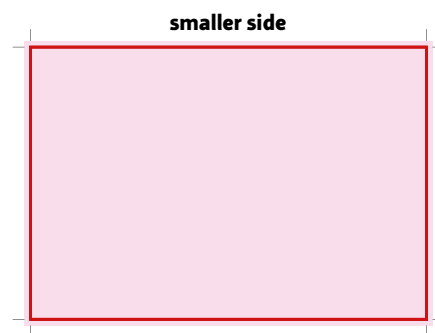
## Frame puzzle

This type of puzzle is placed in a frame. It should be prepared the same as the playboard with covered edges. The part with the puzzle image stands for a larger side and the back for a smaller side. The puzzle image inside the frame should include its individual safe margin and bleed.



**larger side**  
 net:  $(a + 35) \times (b + 35)$   
 gross:  $(a + 45) \times (b + 45)$

**smaller side**  
 net:  $(a - 10) \times (b - 10)$   
 gross:  $a \times b$

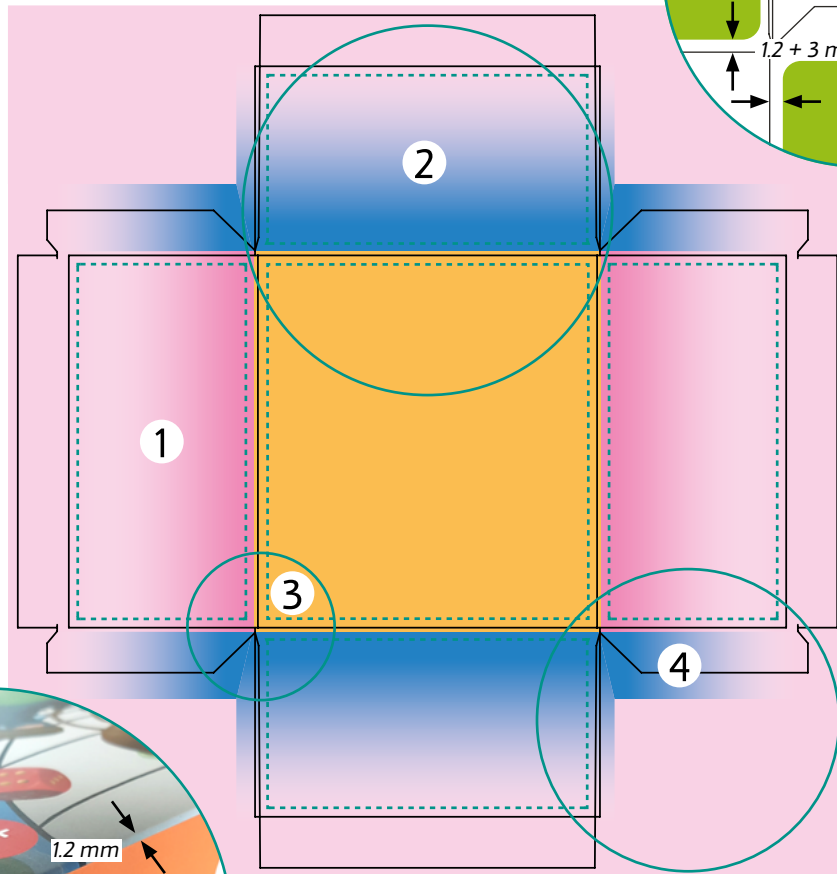
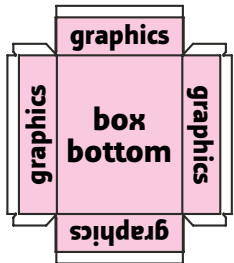
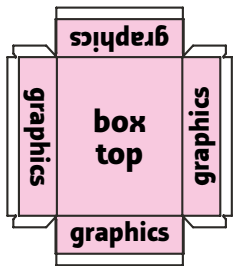
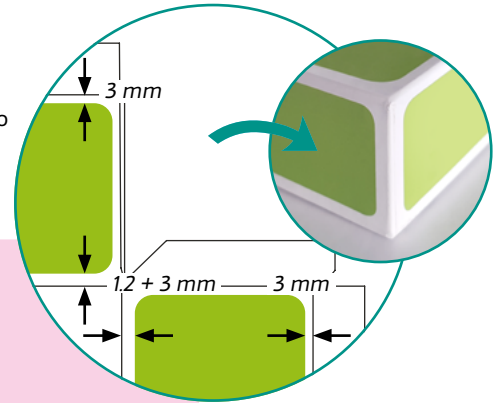


# Rigid box

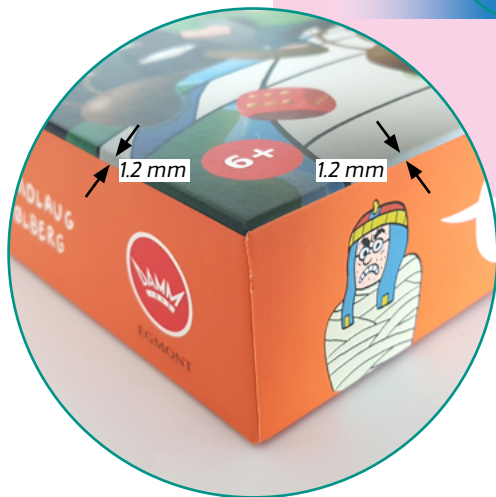
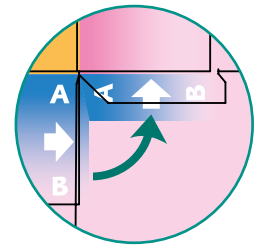
The template shows an unfolded flat box. It does not yet take into account the thickness of the grey board, nor the process of gluing the board with coated/linen paper. When designing the box, keep this in mind and consider the following:

- 1 Make sure that the graphics on the box sides are not prepared upside down.

- 2 To obtain optically centered graphics on the sides of the box, you should keep a safe margin of at least 3 mm and take into account the thickness of the grey board on the edge (e.g. 1.2 mm if there is a 1.2 mm grey board in your order).

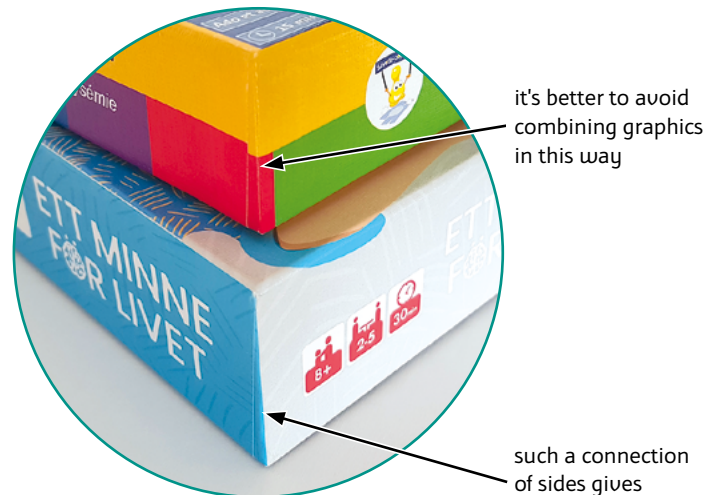


90 degree rotation



- 4 To obtain aesthetic box corners, you should pay attention to the way the graphics are combined in the corners of the box.

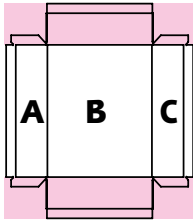
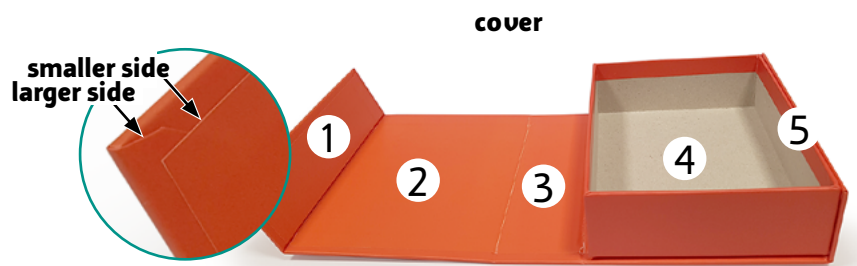
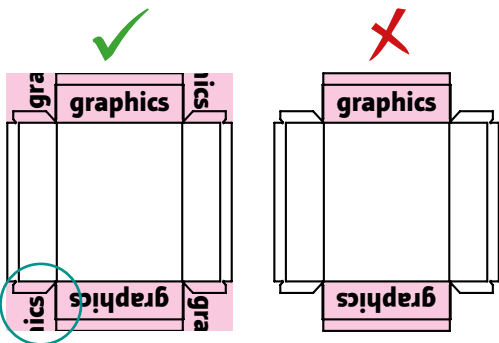
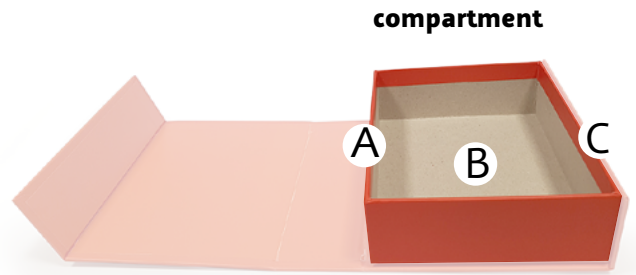
- 3 The graphics on the front should overlap the sides of the box by the thickness of the grey board of the box, and the graphics on the sides should be offset down by the same amount.



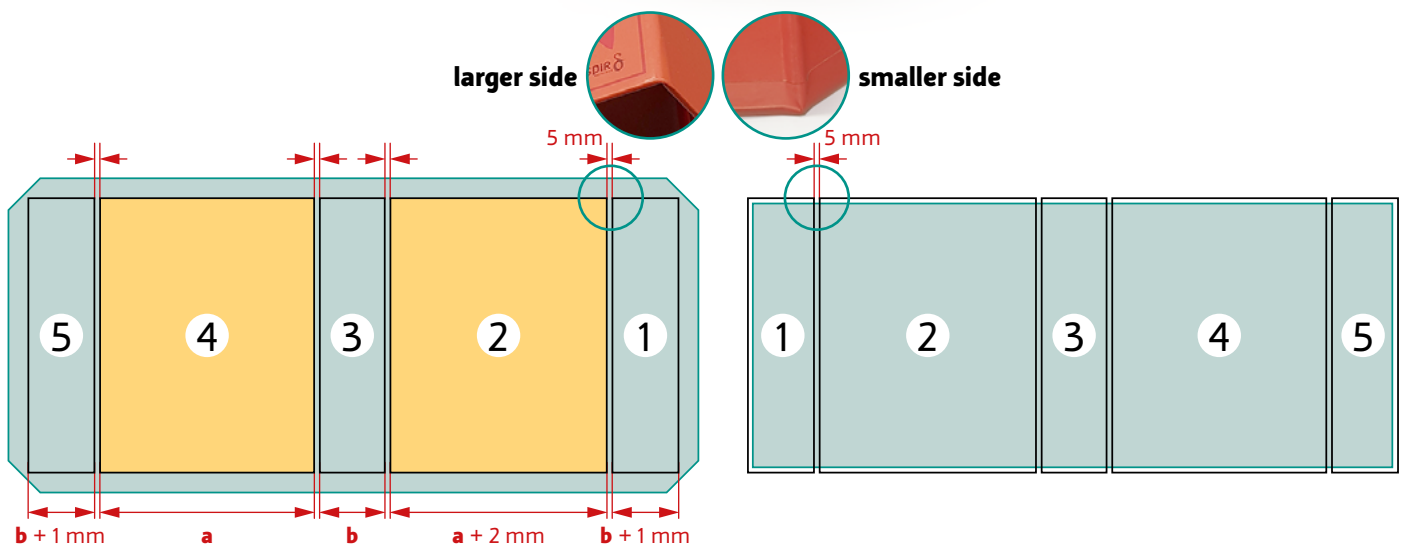
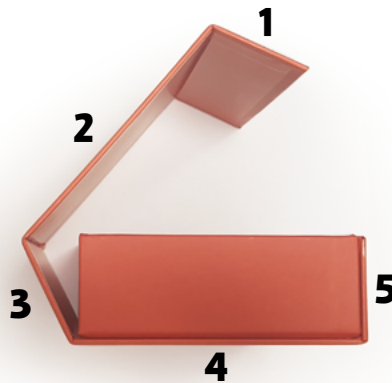
# Magnetic box

This type of box consists of 2 parts - a compartment part and a cover. The preparation of the compartment is the same as the bottom of the rigid box. Preparation of the cover - like a playboard with covered edges.

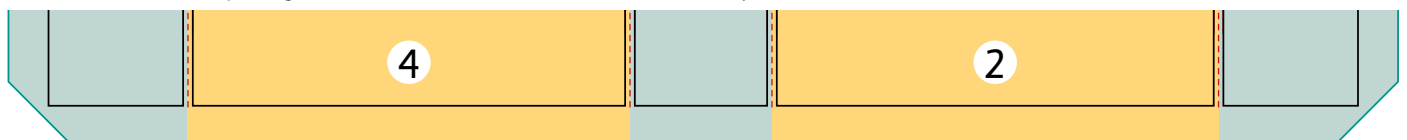
Since the compartment is glued to the cover, areas A-B-C will not be visible (surely, area A will not be visible when the box is closed).

Pay attention to the way the graphics are combined in the corners of the compartment.



artwork of the adjoining sides of the cover should be centered on the spines



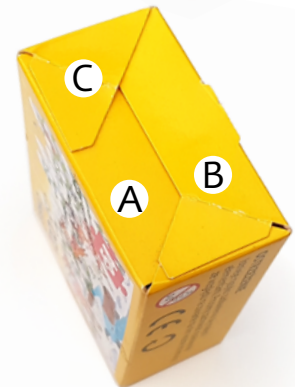
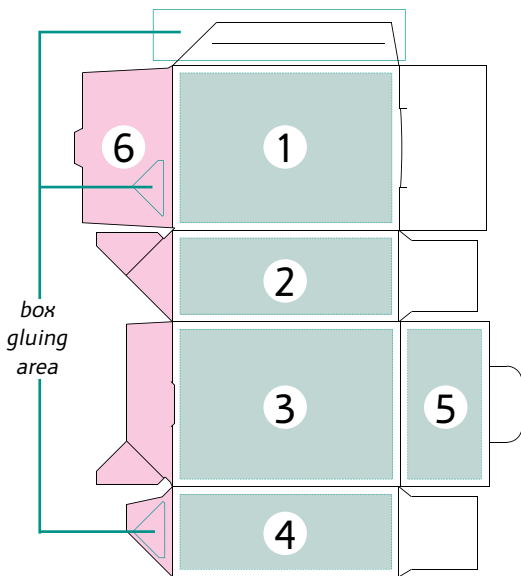
# Tuck box

The tuck box when folded becomes a cuboid. So we can distinguish six main areas designated for graphics. When designing a tuck box, you should pay special attention to the transitions of bleeds between individual areas of the graphic. It is safest to prepare the background of the tuck box in a uniform color and place the artwork inside the safe area of 1-5.

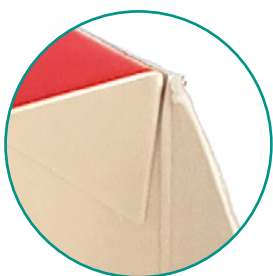
## puzzle tuck box



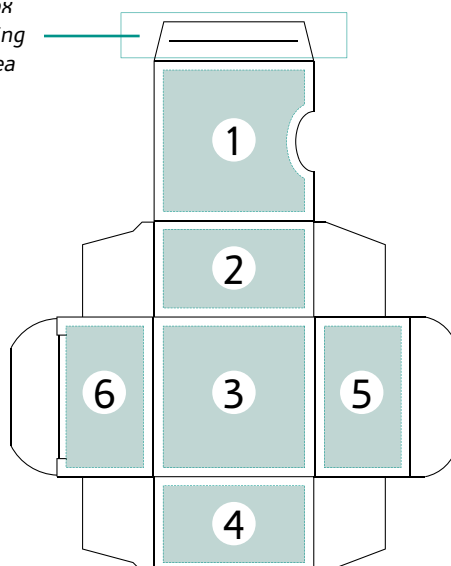
*In the case of a puzzle tuck box, area 6 should not contain any important graphics as this is the gluing side of the box. The individual flaps overlap in the order A-B-C.*



## memo tuck box



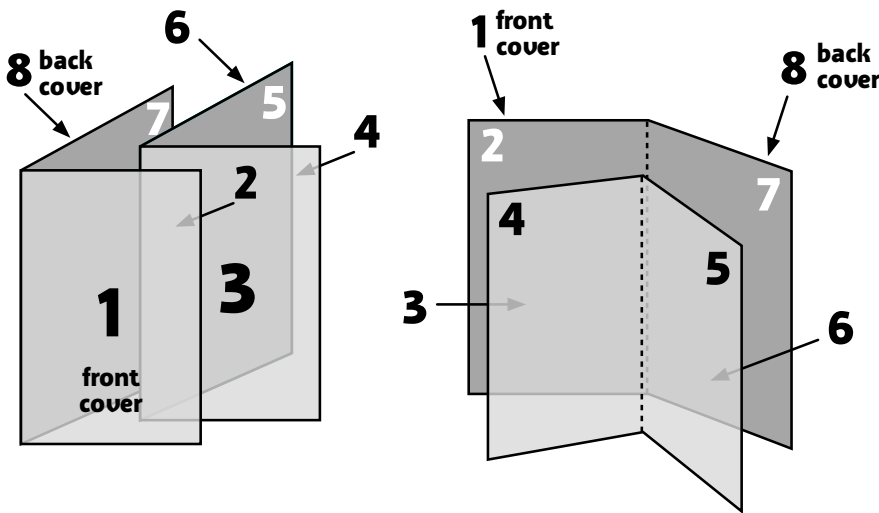
box gluing area



## Manuals, brochures, leaflets

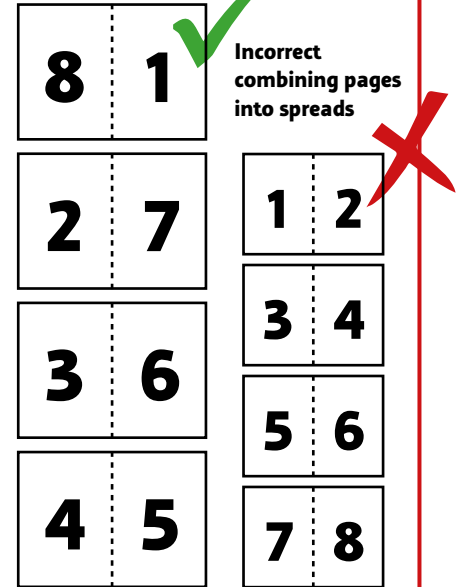
There are many different types of brochure folds. The graphic file should be prepared according to the selected type of fold.

**Half-Fold.** This type of fold is most common for booklets. It consists of a cover and inside pages. Half-fold will apply to 4 pages and multiples of 4 (8, 12, 16, etc.). For more than 4 pages, it is recommended to add pagination. Depending on how many pages your booklet has, we distinguish a **saddle stitch binding** which works very well for smaller page counts, or **perfect binding** which is great for larger page counts.

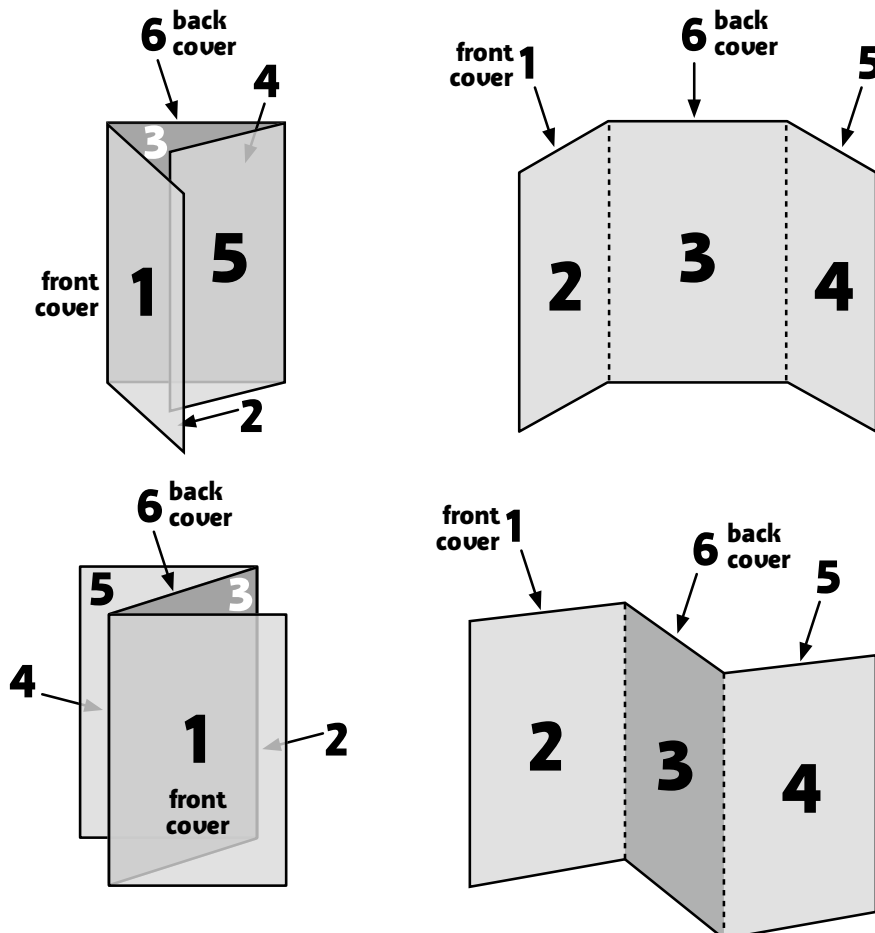


The file should be prepared *page by page in one PDF*, i.e. an 8-page booklet is a PDF with 8 pages.

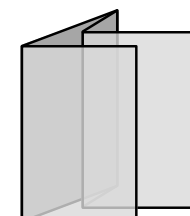
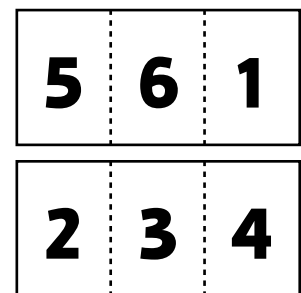
Remember to export as pages, not spreads. Combining pages into spreads is a print shop job, performed as follows:



Brochures with a page count other than 4 or multiples of 4 can be made using other types of folding: **Tri-Fold**, **Z-Fold**, **Open Gate Fold**, **Closed Gate Fold**, **Double Parallel Fold**, **Accordion Fold**, etc.



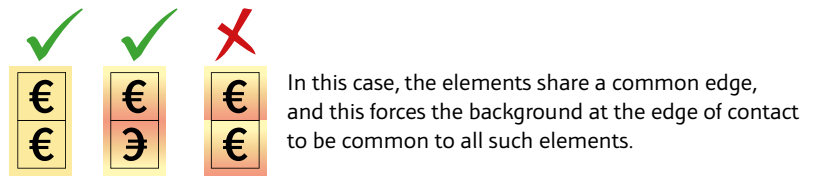
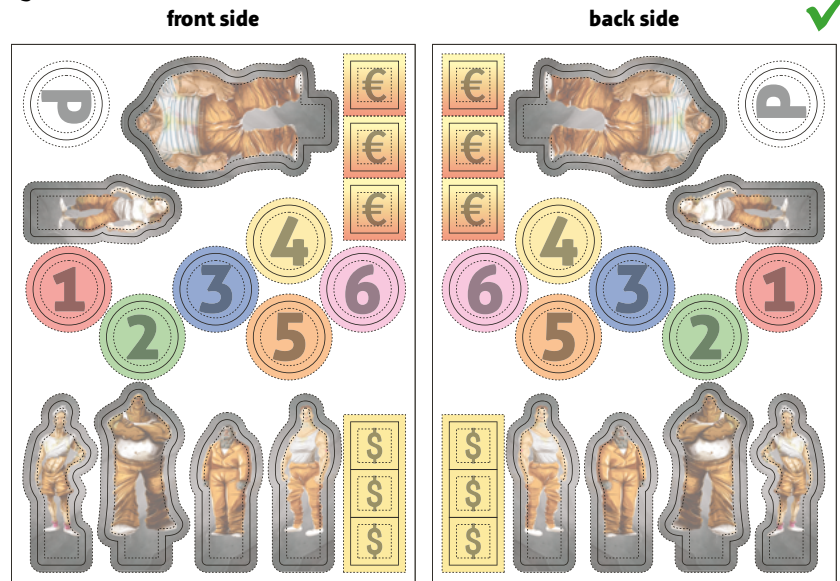
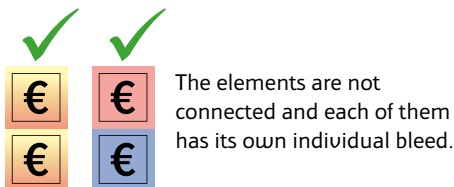
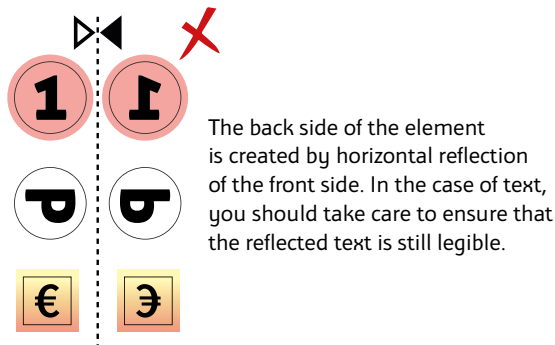
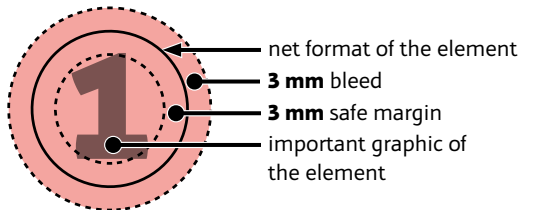
Unlike a half-fold brochure, the file should be prepared as *a spread, not page by page*.



8 pages can be not only a half-fold brochure.

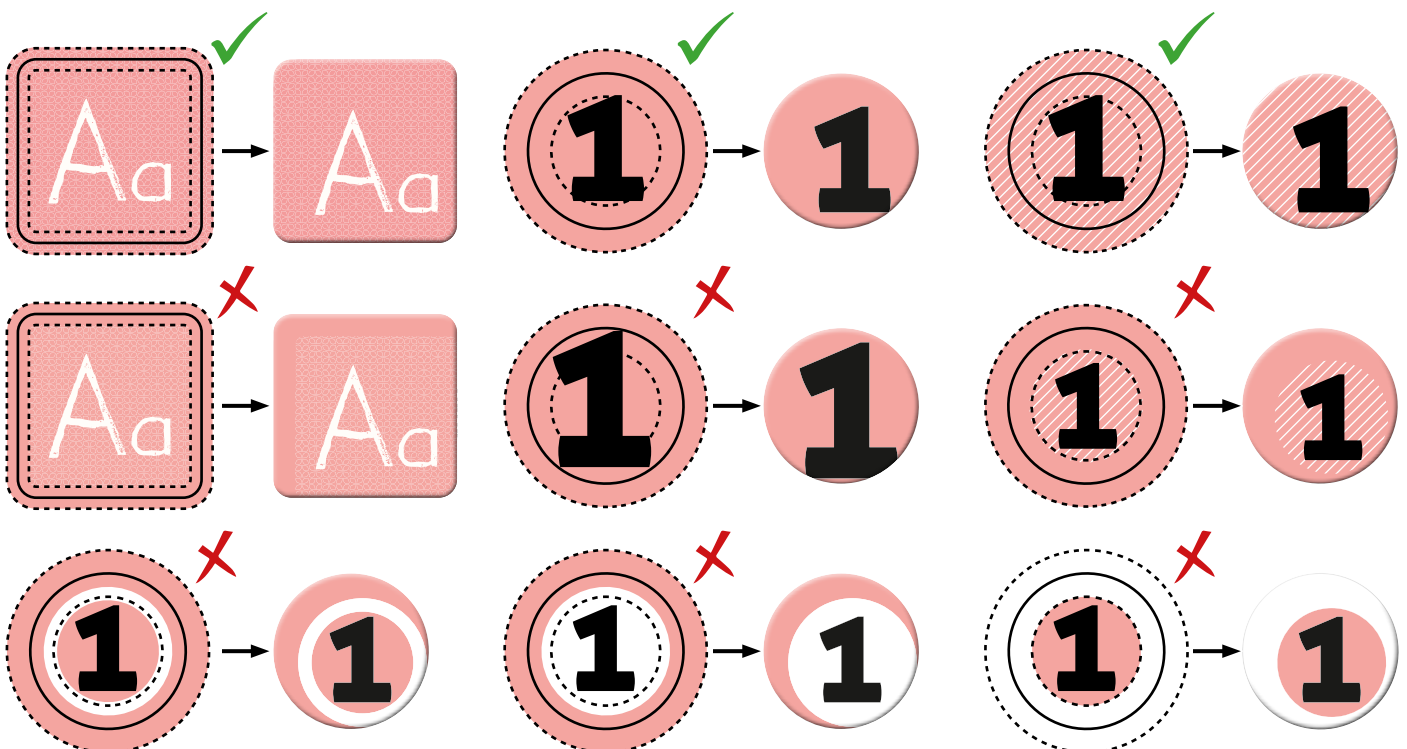
## Memory cards and other punchboard elements

For the optimal use of the material, the template layout is prepared by Trefl Factory. However, you can provide graphics for review and irregular shapes if they are to be included in the punchboard. In this case, your shapes should be vector, not raster images.



The graphics of the punchboards should be prepared in such a way as to eliminate the visibility of shifts in the production process. Frames and borders that accurately reflect the shape of the element should be avoided. **It is impossible to completely eliminate shifts in the process of punchboard production.**

The shift effect depending on the preparation of the graphics:



## Playing cards

PDFs for cards should be divided into fronts and backs. This means that 1 deck of cards requires 2 files.



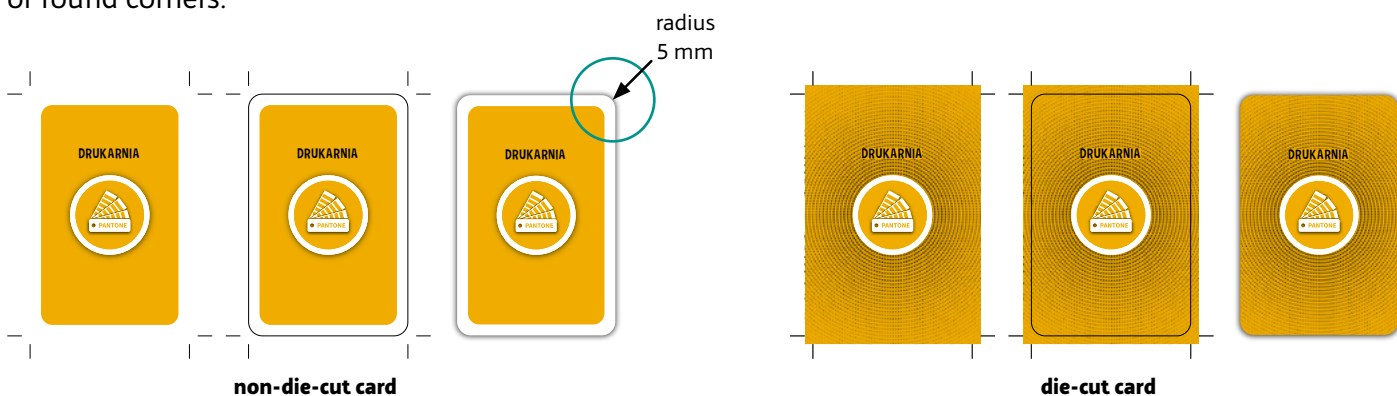
If your project has more than one deck of cards, split the files into decks as follows, naming the decks A-B-C, etc.

**deck A\_front.pdf**  
**deck A\_back.pdf**  
**deck B\_front.pdf**  
**deck B\_back.pdf**

...

a minimum of **32** cards in a deck  
 a maximum of **56** cards in a deck

We distinguish two types of cards that can be ordered: **die-cut cards** and **non-die-cut cards**. Each of them requires a different graphic preparation. Depending on your preferences, both card types can have sharp or round corners.



non-die-cut and non-framed card

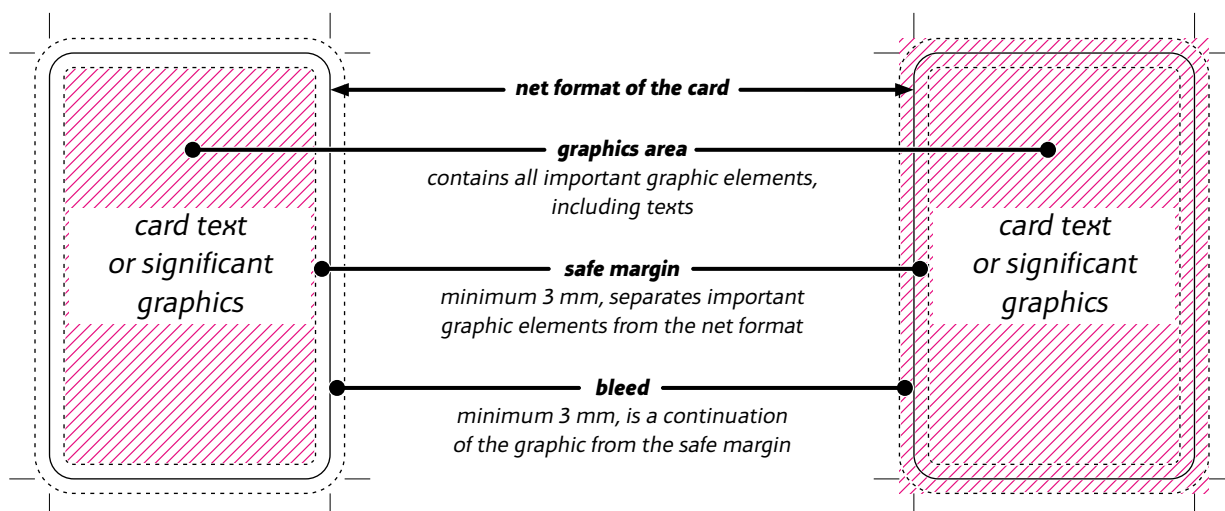


non-die-cut frame card

The frame on non-die-cut cards should be the same color within the front or back (all fronts of all decks must have the same color frame and all backs of all decks also, although not necessarily the same as the fronts).

Three basic card formats:

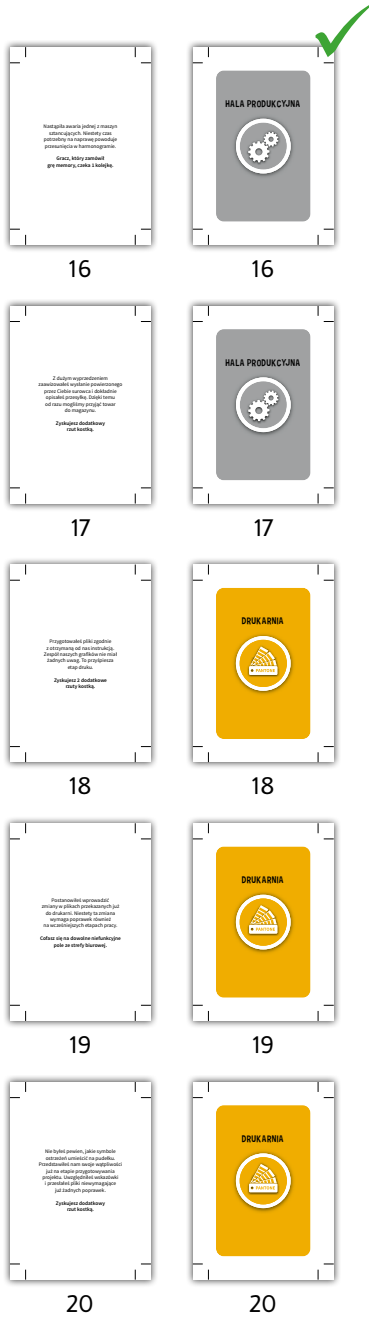
**bridge 58 × 88 mm**  
**poker 63 × 88 mm**  
**solitaire 44 × 68 mm**



The number and order of pages in each file should match the number and order of cards in the deck. If a card appears in the deck more than once, it should be repeated in the file as many times as it appears in the deck. The exception is the back which is the same for all cards. If there is the same back for all cards in the deck, then 1 side of the back is enough in the file.

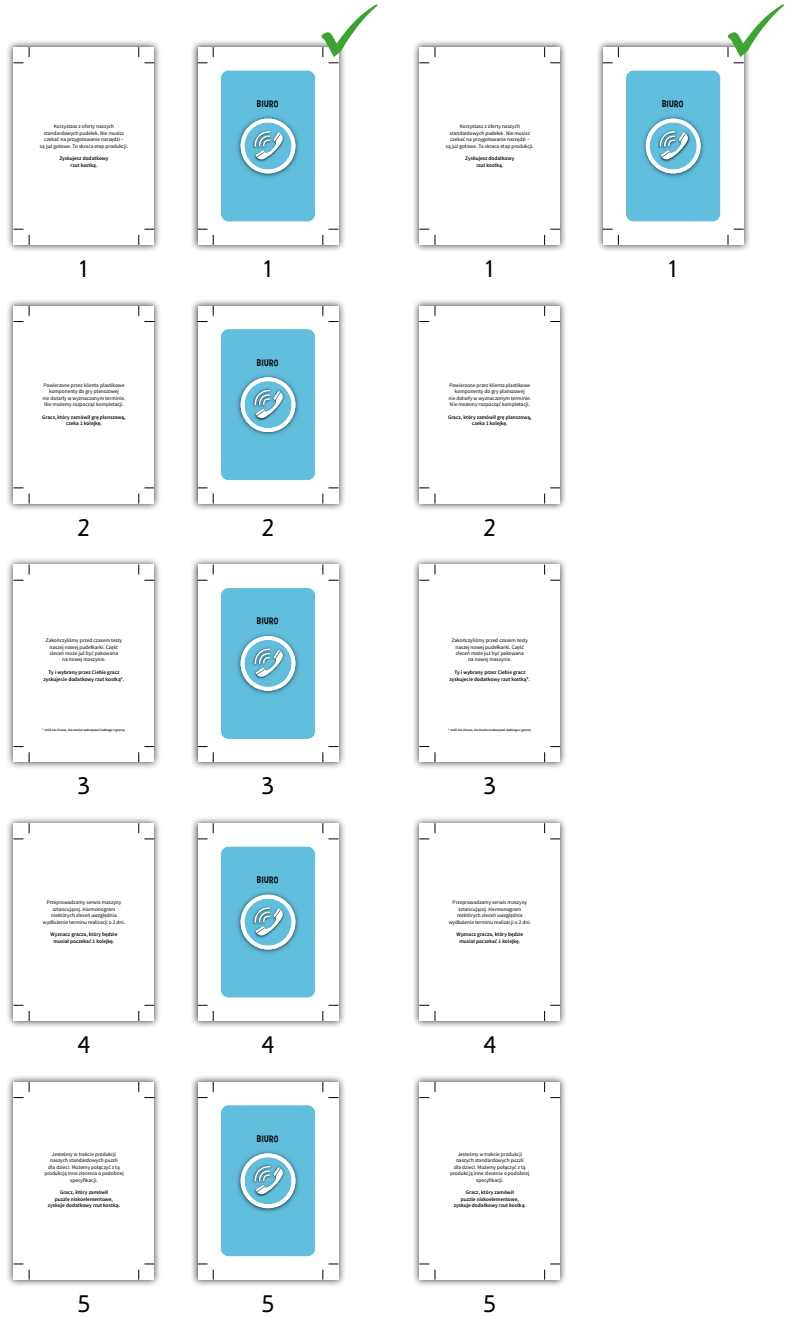
a deck of 55 cards with different backs:

**\_front.pdf (55 pages in pdf)**  
**\_back.pdf (55 pages in pdf)**



a deck of 55 cards with the same back for all:

**\_front.pdf (55 pages in pdf)**  
**\_back.pdf (55 pages in pdf)**      **\_front.pdf (55 pages in pdf)**  
**\_back.pdf (1 page in pdf)**



If there are cards with different backs in the deck, there is **only one way** to prepare the file.

If the back is the same for all cards in the deck, there are two ways to prepare the file.

**!** Cards divided into categories rather than decks **will not be accepted.**

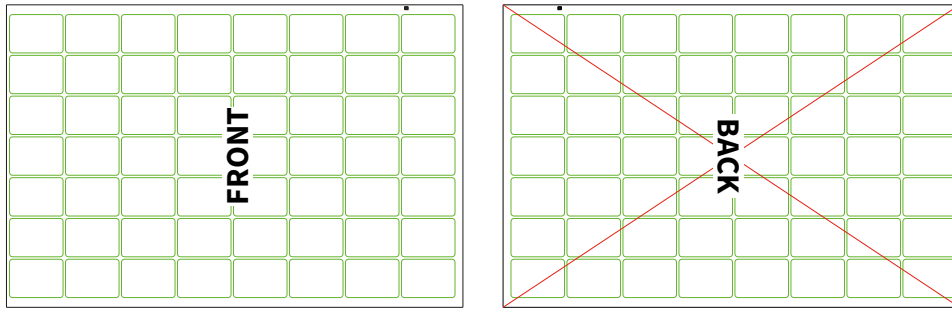
**gray cards\_front.pdf**  
**gray cards\_back.pdf**

**yellow cards\_front.pdf**  
**yellow cards\_back.pdf**

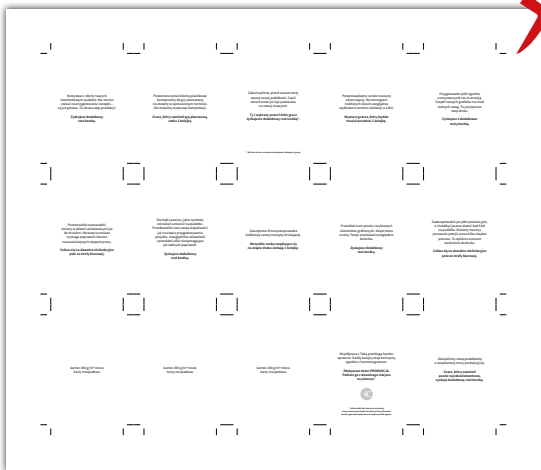
**X**



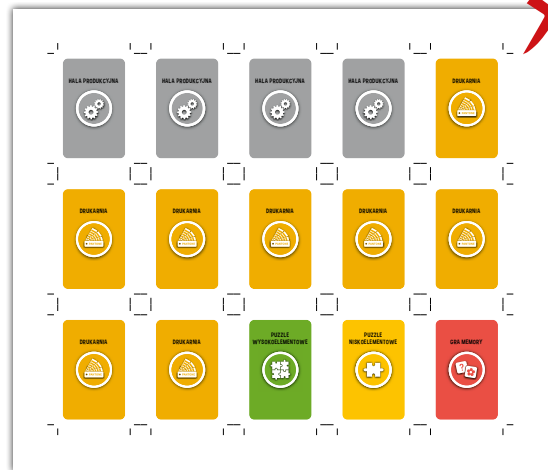
The distribution of cards on the printing sheet is a print shop job, performed as follows:



Files prepared by the customer in this or similar way, distributed on one sheet, will not be accepted.

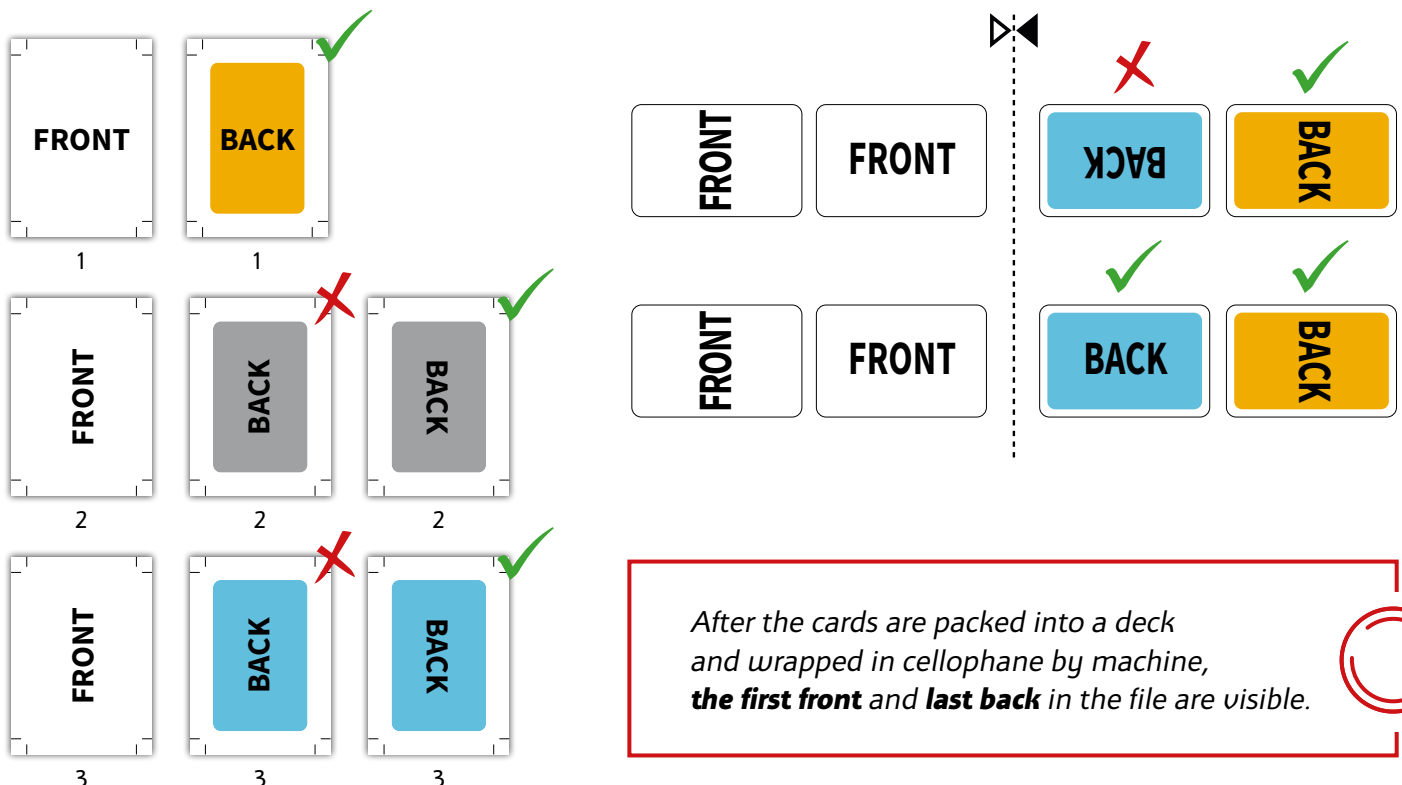


deck\_front.pdf (1 page in pdf)



deck\_back.pdf (1 page in pdf)

Similarly, as with punchboards, the back of the card is created by the horizontal reflection of the front. The cards in the deck can have a vertical and horizontal layout. In this case, it is necessary to check whether the card text is still readable for both layouts.



After the cards are packed into a deck and wrapped in cellophane by machine, **the first front and last back** in the file are visible.



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