

# Software manual

## ZDC 6.0



Translation of the original  
Read this manual prior to performing any task!

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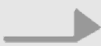


### General equal treatment

This guide uses the masculine grammatical form in a neutral sense to keep the text easier to read. It always addresses all genders in the same way.

### Storage and use of the manual

This manual enables the safe and efficient use of the software. This manual is an integral part of the software and must be kept accessible to the personnel, in the respective national language, in the latest version, and in the vicinity of the software. The personnel must read and understand this manual carefully before beginning any work. The illustrations in this manual are intended to provide a basic understanding and may differ from the actual design.

### General conventions

Marking	Explanation
DANGER	This signal word indicates an imminently hazardous situation which will result in death or serious injury.
WARNING	This signal word indicates an immediately hazardous situation which could result in serious injury.
CAUTION	This signal word indicates an imminently hazardous situation which may result in minor or slight injury.
NOTE	This signal word indicates material damage.
ENVIRONMENT	This signal word indicates environmental damage.
<i>i</i>	Tip, advice or summary of a topic
	Individual action step of an action instruction
	Intermediate or end result of an action
	Reference to further information
[Approval] button	Operating elements such as buttons, switches, ...
<i>"Start"</i>	Screen elements such as buttons, menu entries, ...
Code	Representation of programming code or file paths
1.5 kg	The decimal separator used in figures is a period.

### Trademark protection

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# 1 Zünd Design Center (ZDC)

This software manual describes the “Zünd Design Center (ZDC)” software in version v6.0.

The Zünd Design Center is an Adobe Illustrator plug-in for the creation of packaging and three-dimensional POS displays made from folding carton, corrugated cardboard, sandwich material and PP, PVC, MDF and lightweight foam boards.

An extensive library with templates forms the basis of the ZDC. All included designs are parameterized, which means that you only have to determine the relevant dimensions. All other measurements are calculated automatically.


- Select a design from the library and enter individual dimensions if needed.
- Complete the design in Adobe Illustrator with logos, templates, text, and other design components.
- Check the three-dimensional folding result of your design at any time in the 3D view.
- Configure the desired material settings, such as transparency.
- Export the design to prepare a proposal or make presentations in the form of a 3D PDF, an image in .png format, an .mp4 video file or a three-dimensional object.
- Export the design to the Zünd Design Center.

The “Zünd Design Center (ZDC)” includes creations by well-known packaging designers as well as standard designs (FEFCO). You can also start with an optimized template and create your very own design.




*Every design is already formatted, so that you can import it directly into the Zünd Cut Center without any intermediate steps.*

## Design catalog

The design catalog  illustrates the available design templates of the library. In the course of the design process you can start with an existing design template and adjust it to your individual parameters.

You will find the design catalog  in the [Library] window .

## Information about the software

You will find the following basic software information in the [Settings] area .

- Program version
- Information on the active license
- Software help
- License agreement



## 2 Installation

### 2.1 Downloading software

**Target:**

The following describes how to download a piece of software from MyZund.

- You are logged in to MyZund.

1. ➤ Open the *"Software"* area.
2. ➤ Select the desired software product.
3. ➤ Select the *"Installer"* tab.
4. ➤ Click on the desired download package.

\*.pkg                      Apple OS

\*.exe                      Microsoft Windows

➔ The selected software package is downloaded.

### 2.2 Windows operating system

#### 2.2.1 System requirements and compatibility

The *"Zünd Design Center"* requires that Adobe Illustrator is installed. The plug-in is compatible with the following versions (operating system, Adobe Illustrator):

Operating system	CC 2021 (25.2)	CC 2022	CC 2023
Windows® 10 (up to version 21H1)	X	X	X
Windows® 11	X	X	X

The following versions are not supported on Windows® 10: 1507, 1511, 1607, 1703, and 1709.

#### 2.2.2 Uninstalling the old ZDC version

**Target:**

The following describes how the old version is deleted. Avoid version conflicts by uninstalling the old version.

1. ➤ Select: *"Windows → Start → Settings → Programs"*.
2. ➤ In the list, search for *"ZDC"*.
3. ➤ Mark *"ZDC"* in the search results. If *"ZDC"* is not listed, *"ZDC"* was not installed on the computer.

4. ➤ Select [Uninstall] and follow the instructions.
  - ➡ The old version is uninstalled.

### 2.2.3 Installing the ZDC

**Target:**

The following describes how to install ZDC on the computer.

**Requirement:**

- Subscription is activated
- Software is downloaded
- Adobe Illustrator is ended

1. ➤ Double-click on the installation file.
2. ➤ Follow the instructions of the installation routine.
  - Select the language
  - Confirm the license agreement
  - Select the installation components
  - ➡ The software is installed by the installation routine.
3. ➤ Complete the installation with [Finish].
  - ➡ The software is installed.

## 2.3 macOS operating system

### 2.3.1 System requirements and compatibility

The Zünd Design Center requires that Adobe Illustrator is installed. The plug-in is compatible with the following versions (operating system, Adobe Illustrator):






Operating system	CC 2021 (25.2)	CC 2022	CC 2023
OS 11	X	X	-
OS 12	X	X	X
OS 12 (M1 native) *	-	X	X
OS 13	X	X	X
OS 13 (M1 native) *	-	X	X

\* ZDC 6.0 has native support for Apple M1 processors. Rosetta (Mac version) is only required when using a hardware license dongle.

### 2.3.2 Deleting the old version

#### Target:

The following describes how the old version of ZDC is deleted. Avoid version conflicts by deleting the old version.

1.  Open the *"Finder"*.
2.  Select: *"Programs → Adobe Illustrator → Plug-ins"*
3.  Move the *"ZDC.aip"* file to the recycle bin.
4.  Move the *"ZundDesignCenter"* folder to the recycle bin.
5.  Empty the recycle bin.
  - ➡ Zünd Design Center is deleted.

### 2.3.3 Installing the ZDC

#### Target:

The following describes how to install ZDC.

#### Requirement:

- Subscription is activated
- Software is downloaded
- Adobe Illustrator is ended

1. ➤ Double-click on the downloaded installation file.
2. ➤ Follow the instructions of the installation routine.
  - ➡ The software is installed by the installation routine.
3. ➤ End the installation routine with [Close].
  - ➡ The software is installed.

## 2.4 Adjusting Adobe

### 2.4.1 Adjusting Adobe Illustrator

#### Target:

The following describes how the settings in Adobe Illustrator are adapted for ZDC.

1. ➤ Start Adobe Illustrator.
2. ➤ Select: "Window → Layers".
3. ➤ In the "Layers" menu, activate the "Remember layers when pasting" option.
  - ➡ The settings of Adobe Illustrator are now adapted.

### 2.4.2 Adjusting the Creative Cloud Desktop



*Before each update or new version of Adobe Illustrator, check its compatibility with the ZDC. If the ZDC is incompatible with the new version of Adobe Illustrator, this can result in malfunctions. ➡ [Chapter 2.2.1 "System requirements and compatibility" on page 9](#)*

*In this regard, also observe the available settings in the "Creative Cloud Desktop". The following settings are possible:*

- *Import previous settings and default settings when updating Adobe Illustrator.*
- *Keep earlier versions of Adobe Illustrator.*

## 3 Licensing








### 3.1 Activating the license

**Target:**

The following describes how the software is enabled with a valid license.

**Requirement:**

- Computer has an active Internet connection
- CodeMeter Control Center is installed
- Software to be licensed is installed

1.  Log in to MyZund:  
➔ <https://my.zund.com>.
2.  Select: *"MyAssets → Software"*.
3.  Select the software to be licensed in the list.
4.  Read and confirm the *"Zünd Software Conditions"*.
5.  Select the *"Activate and manage software"* function.  
➔ The web portal opens.
6.  Check the checkbox for the desired license.
7.  Select the [Activate selected licenses now] function.  
➔ The selected software is enabled according to your subscription.







### 3.2 Extending the license


**Target:**

The following describes how to activate a subscription extension.

**Requirement**

- Computer has an active Internet connection
- CodeMeter Control Center is installed
- Software to be licensed is installed
- License to be extended was purchased in MyZund

1.  Log in to MyZund:  
➔ <https://my.zund.com>.
2.  Select: *"MyAssets → Software"*.
3.  Select the software to be licensed in the list.
4.  Select the *"Renew license"* function.  
➔ The web portal opens.
5.  Check the checkbox for the desired license.
6.  Select the [Auto-update] function.

7.  Select the [Transfer license update now] function.
  - ➡ The software is enabled according to the subscription you have selected.

### 3.3 Sharing the license

#### Target:

The following describes how a license can be shared within an organization over a network.





Depending on the software product, it can be shared as follows:

- A valid license can be used at multiple computers at staggered times.
- Multiple licenses can be used simultaneously on multiple computers. The number of licenses defines the number of available computers for the software.







#### Requirement:

- You have defined a computer as a license server.
- The license server and the license client are in the same network.
- The license in question is already activated on the license server.
- CodeMeter Runtime must be installed on the license server with the *"Network server"* option.
- The software to be shared and CodeMeter Runtime are installed on the license client.

#### *Setting up the license server*

1.  Switch to the computer that you have defined as the license server.
2.  Open the CodeMeter WebAdmin:
  - ➡ <http://localhost:22350>.
3.  Select: *"Settings → Servers → Server access"*.
4.  Activate the *"Activate network server"* option.
  - ➡ The server service can provide the license.

#### *Setting up the license client*

5.  Switch to the computer that you have defined as the license client.
6.  Open the CodeMeter WebAdmin:
  - ➡ <http://localhost:22350>.
7.  Select: *"Settings → Basic → Server search list"*.
8.  Click on [Add new server].
9.  Enter the server name or IP address.
10.  Confirm the input with [Add].
  - ➡ The client can obtain the license from the server.

### 3.4 Transfer the license

#### 3.4.1 Transferring the license directly (online)

**Target:**

The following describes how to transfer a license to a different computer. This may be necessary, for example, if the computer must be replaced and the software is being used on the new computer. A license can only ever be active on one computer.

**Requirement:**

- The source and target computers have an active Internet connection.
- The software and CodeMeter Control Center are installed on the target computer.
- The software must be ended on all computers.

***Return license(s)***

1. ➤ Switch to the source computer.
2. ➤ Log in to MyZund:  
➔ <https://my.zund.com>.
3. ➤ Select: *"MyAssets → Software"*.
4. ➤ Select the corresponding software.
5. ➤ Select the *"Activate and manage software"* function.  
➔ A WebDepot window opens.
6. ➤ Select the *"Move licenses"* function.
7. ➤ Check the checkbox for the desired license.
8. ➤ Select the *"Return selected licenses now"* function.  
➔ You have returned the license to CodeMeter.

***Activate license(s)***

9. ➤ Activate the license as described under *"Activating a license"*.  
➔ You have transferred the license(s) online.

### 3.4.2 Transferring a license by file (offline)

#### Target:

The following describes how to transfer the license to a different computer. This may be necessary, for example, if the computer must be replaced and the software is being used on the new computer. A license can only ever be active on one computer.

Zünd always recommends transferring the license directly:  
 ➔ *Chapter 3.4.1 "Transferring the license directly (online)" on page 15*

#### Requirement:

- The software to be licensed and CodeMeter Control Center are installed on the target computer.
- Data can be exchanged between the two computers.
- A computer has an active Internet connection.
- The software must be ended on all computers.

#### *Creating a request file*

1. ➔ Switch to the source computer.
2. ➔ Start CodeMeter Control Center.
3. ➔ In the main window, select the *"License update"* function.
  - ➔ The CmFAS wizard opens in a new window.
4. ➔ Click on [Next].
5. ➔ Select the *"Generate license request"* option.
6. ➔ Select a filename and storage location.
  - ➔ A license request file has been created.

#### *Requesting an update file*

7. ➔ Switch to a computer with an active Internet connection.
8. ➔ Copy the request file to the computer with the active Internet connection.
9. ➔ Log in to MyZünd:
  - ➔ <https://my.zund.com>.
10. ➔ Select: *"MyAssets → Software"*.
11. ➔ Select the corresponding software.
12. ➔ Select the *"Activate and manage software"* function.
  - ➔ A WebDepot window opens.
13. ➔ Select the [Move licenses] function.
14. ➔ Select the [File-based license transfer] function.
15. ➔ Check the checkbox for the desired license.
16. ➔ Select the [Select file] function.



### ***Importing an update file***

- 17.** Select the license request file created in the previous section and confirm with [Ok].
- 18.** Select the [Upload request now and continue] function.
  - ➡ The request is processed. This generally only takes a few seconds.
- 19.** Select the [Download the license update file now] function.
  - ➡ The license update file is downloaded.
  - ➡ Leave WebDepot open.
- 20.** Switch to the computer on which you want to activate the software.
- 21.** Copy the update file to the computer on which you want to activate the software.
- 22.** Start *"CodeMeter Control Center"*.
- 23.** In the main window, select the *"License update"* function.
  - ➡ The CmFAS wizard opens in a new window.
- 24.** Click on [Next].
- 25.** Select the [Install the license update] option and click on [Next].
- 26.** Select a filename.
  - ➡ A license update file was imported.
- 27.** In the main window, select the [License update] function.
  - ➡ The CmFAS wizard opens in a new window.

### ***Creating an acknowledgment file***

- 28.** Click on [Next].
- 29.** Select the *"Generate acknowledgment"* option and click on [Next].
- 30.** Select a filename and storage location.
  - ➡ The acknowledgment file has been created.

### ***Sending an acknowledgment file***

- 31.** Switch to the computer with WebDepot open.
- 32.** Copy the acknowledgment file to the computer with WebDepot open.
- 33.** Click on [Next].
- 34.** Select the *"Select file"* function.
- 35.** Select the acknowledgment file created in the previous section and confirm with [Open].
- 36.** Select the *"Upload acknowledgment now"* function.
  - ➡ If the transfer was successful, you get the *"License transfer was completed successfully"* message.

## 4 Orientation

### 4.1 Main window

On the “Zünd Design Center” main window, you can navigate to all the functions of the Zünd Design Center.

You can find the main window under “Adobe Illustrator → Window → Zünd Design Center”.

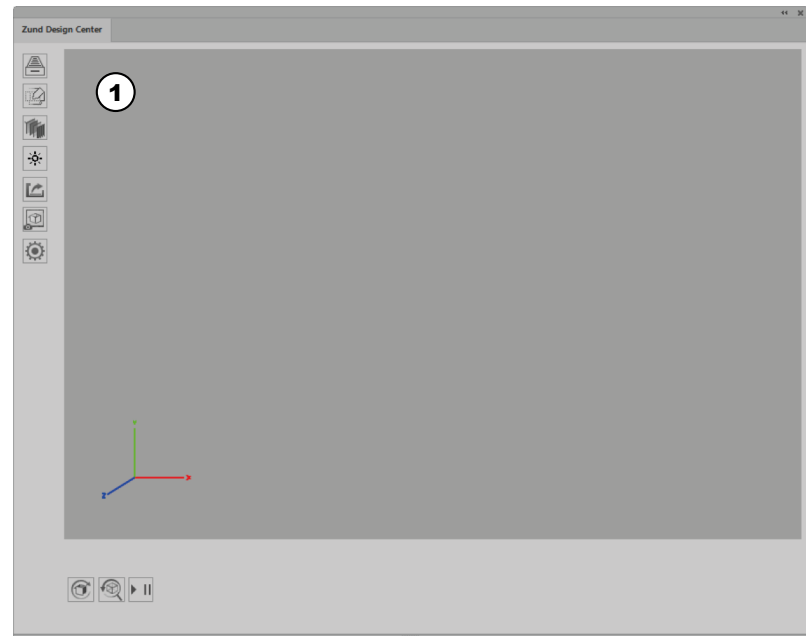












Fig. 1

1 Preview window with coordinate system

-  [Library]
-  [New template]
-  [Materials]
-  [Activate light]
-  [Export]
-  [Copy image]
-  [Settings]
-  [Update] an animation
-  [Reset] an animation
-  [Player]

The size of all windows of “Zünd Design Center” can be adjusted by dragging a side or corner.

## 4.2 Processing methods

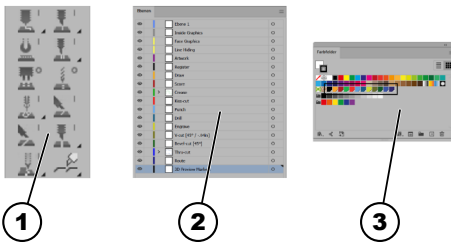


Fig. 2

- 1 ZDC toolbar
- 2 Layers
- 3 Spot colors


The paths are assigned in Adobe Illustrator to the respective methods. A layer with a spot color is assigned to each processing method. Created paths can be assigned to the desired processing methods using the layers or the spot colors.

Using the ZDC toolbar in Adobe Illustrator, a path of the desired processing method can be created directly.

The following table gives an overview of the methods:

Symbol	Method	Spot color
-	Inside graphics	-
-	Face graphics	-
-	Line hiding	-
-	Artwork	-
-	Register	■ R0-G0-B0
	Draw	■ R250-B165-G44
	Score	■ R169-B29-G34
	Crease	■ R25-G178-B75
	Kiss-cut	■ R238-G50-B43
	Punch	■ R96-G158-B213
	Drill	■ R29-G90-B133
	Engrave	■ R207-G217-B53
	V-cut	■ R103-G108-B46
	Bevel-cut	■ R20-G87-B44
	Thru-cut	■ R57-G83-B164
	Route	■ R50-G43-B112
-	3D preview markers	-

## 4.3 Settings

Via the [Settings] area , you can define the individual settings for general and specific functions of the Zünd Design Center.

You will find the [Settings] area  under “Adobe Illustrator → Window → Zünd Design Center → Settings”.

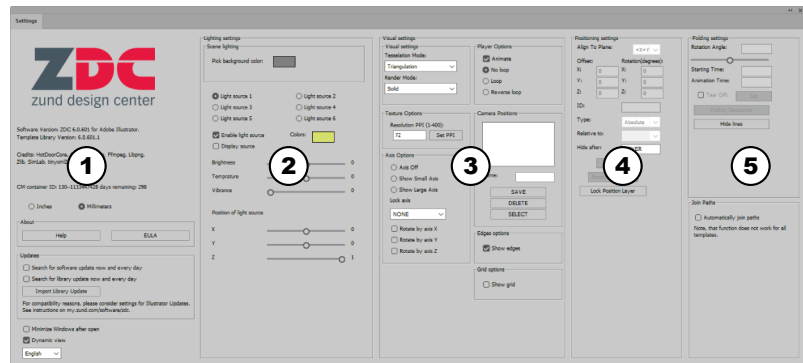



Fig. 3

- 1 General settings
- 2 Lighting settings
- 3 Visual settings
- 4 Positioning settings
- 5 Folding settings

## 4.4 Library

Via the [Library] area , you can select existing design templates, edit them individually and define settings for general and specific functions of the Zünd Design Center for the next steps in the design process.

You will find the [Library] area  under “Adobe Illustrator → Window → Zünd Design Center → Library”.

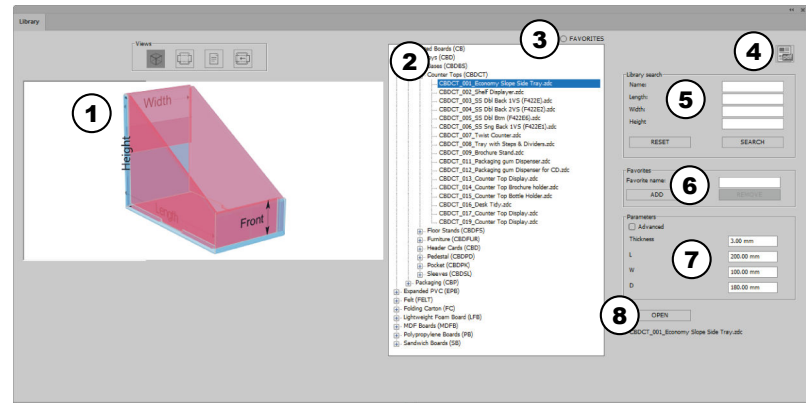






Fig. 4

- 1 View display
  - 2 Library of templates
  - 3 [Show favorites] or [do not show favorites]
  - 4 Design catalog as PDF
  - 5 Library search
  - 6 [Add] or [Delete] favorites
  - 7 Edit parameter settings
  - 8 [Open] or [Cancel] design template
-  Static 3D view
  -  Static 2D view
  -  Info view
  -  Dynamic 2D view

## 5 Set up


### 5.1 Minimizing windows

**Target:**

The following describes how to activate automatic minimization of unnecessary windows after actions have been carried out.

**Requirement:**

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

2. Activate the [Minimize windows after open] checkbox.

➡ The “Minimize window” function is activated.


### 5.2 Dynamically changing the view

**Target:**

The following describes how to activate dynamic view changes.

**Requirement:**

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

2. Activate the [Dynamic view] checkbox.

➡ The “Dynamic view change” function is activated.


### 5.3 Changing the unit of measurement

**Target:**

The following describes how to change units of measurement. The selected unit of measurement is suggested for each input field. If you enter values with a different unit of measurement, these values are automatically converted in the input field.

**Requirement:**

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

2. Mark the checkbox of the desired unit of measurement.

■ [Inches]

■ [Millimeters]

➡ The unit of measurement has been changed.


## 5.4 Changing the language

### Target:

The following describes how to change the language.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .
  - ➡ A window is opened.
2. Select the desired language from the drop-down list.
  - ➡ The message for restarting the Adobe Illustrator window is displayed.
3. Restart Adobe Illustrator.
  - ➡ The language is changed.

## 6 Operation

### 6.1 Working with the ZDC

The basic design process is described here. The ZDC can be used with or without the extensive design library. This description provides you with an overview of the basic workflow.

#### Defining a goal

Your thoughts on the goal set the basic framework conditions for your project. The framework conditions help you during later implementation with the ZDC. Possible questions are:

- Which material do you want to use?
- Do you want to create packaging or a POS display?
- Should the material also be printed?

#### Searching the library

Open the library and search for a suitable template project. The library offers you an extensive selection of prefabricated designs.

➔ [Chapter 6.3.1 "Filtering design templates" on page 25](#)

#### Defining design parameters

Select a design proposal and set the parameters such as thickness, length, width, height.

➔ [Chapter 6.3.5 "Managing design parameters" on page 27](#)

#### Opening the design

Open the design in Adobe Illustrator.

➔ [Chapter 6.3.4 "Opening the design template" on page 26](#)

#### Adapting the design contour

Adapt the design contour, if necessary, to your individual wishes.

➔ [Chapter 7 "Tips and tricks" on page 50](#)

#### Designing interior and exterior areas

If you want to produce packaging, for example, you can customize the interior and exterior areas.

➔ [Chapter 7 "Tips and tricks" on page 50](#)

#### Exporting the design

Export your project in one of the following formats for presentation or production.

➔ [Chapter 6.12 "Exporting the design" on page 45](#)



## 6.2 Creating your own design

### Target:

The following describes how to create an individual design for the design process.







Using the [New template]  function, a new Adobe Illustrator file is opened and you can create your own design.

### Requirement:

- “Zünd Design Center” main window is open



*Use the ZDC's predefined layers and spot colors to assign the desired method to your design. This enables the fold preview and the optimized export to the advanced “Zünd Cut Center” software.*

1.  Click on the [New template] button .
  - ➡ A window is opened.
2.  Select the desired material.
3.  Enter the desired dimensions and the material thickness.
4.  Confirm the input.
  - ➡ A new Adobe Illustrator file is opened.
5.  Create your own design and assign the paths to the possible processing methods.
  - ➡ Your own design is created.

## 6.3 Creating a design from a template






### 6.3.1 Filtering design templates

### Target:

The following describes how to limit the selection of design templates via the library search. The library search can be filtered by name and dimensions.

### Requirement:

- “Zünd Design Center” main window is open

1.  Click on the [Library] button .
  - ➡ A window is opened.
2.  In the “Library search” area, enter the desired filters.
3.  Click on the [Search] button.
  - ➡ In the list, the filtered design templates are listed.
4.  Click on the [Reset] button if you want to reset the filter settings.
  - ➡ The filter settings in the “Library search” area are deleted.

## 6.3.2 Defining the view

### Target:


The following describes how to display the designs of the design library in different views.

### Requirement:

- “Zünd Design Center” main window is open



- *Light blue areas indicate the surface of the design.*
- *Pink folded areas are not visible or are not located on the inside of the packaging when folded.*
- *Green lines indicate the folding lines of the design.*

1. Click on the [Library] button .

➡ A window is opened.

2. Select a design from the list.

3. Select the desired view.

[Static 3D view]



[Static 2D view]



[Info view]



[Dynamic 2D view]



➡ The selected view is displayed in the view display.


## 6.3.3 Selecting the design template

### Target:

The following describes how to select a design template to edit the design for the next steps in the design process.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Library] button .

➡ A window is opened.

2. Select the desired design in the list.

➡ The design was selected.


## 6.3.4 Opening the design template

### Target:

The following describes how to open the design once you have made your desired design selection.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Library] button .

➡ A window is opened.

2. ➤ Mark a design template in the list.
3. ➤ Click on the [Open] button.
  - ➡ The design opens in the Zünd Design Center and Adobe Illustrator.

*i If the design consists of multiple parts, you can determine whether the design should be placed in one or more artboards in Adobe Illustrator.*

### 6.3.5 Managing design parameters


**Target:**



The following describes how to adjust the selected design to individual parameters.

**Requirement:**

- “Zünd Design Center” main window is open



*When entering individual parameters, observe the notes in the [Info view] display .*

1. ➤ Click on the [Library] button .
  - ➡ A window is opened.
2. ➤ Select a design template.
  - ➡ [Chapter 6.3.3 “Selecting the design template” on page 26](#)
3. ➤ In the “Parameter” area, enter the desired parameters.
  - ➡ In the view display, a dynamic 2D view  is displayed with the changed parameters.


### 6.3.6 Updating the library

**Target:**

The following describes how to import the updated library into ZDC.

**Requirement:**

- “Zünd Design Center” main window is open
- Updated library available

1. ➤ Click on the [Settings] button .
  - ➡ A window is opened.
2. ➤ Click on the [Import library update] button.
  - ➡ A window is opened.
3. ➤ Select the new library from the directory.
4. ➤ Confirm with [Open].
  - ➡ The library is now updated.

## 6.4 Managing design favorites

### 6.4.1 Saving a design as a favorite

**Target:**

The following describes how to mark a design as a favorite.

**Requirement:**

- “Zünd Design Center” main window is open



*A design can be saved as a favorite with customized parameters or name.*

1. Click on the [Library] button

➡ A window is opened.

2. Deactivate the [FAVORITES] option above the designs.

3. Mark a design in the list.

4. Adjust the “parameters” as you want.

5. Switch to the “Favorites” field and enter a name.

6. Click on the [Add] button.

➡ The marked design with the associated parameters is marked as a favorite.

➡ The favorite name is added to the marked design.

### 6.4.2 Showing favorites

**Target:**

The following describes how to display designs marked as favorites.

**Requirement:**

- “Zünd Design Center” main window is open
- At least one design has been marked as a favorite

1. Click on the [Library] button

➡ A window is opened.

2. Activate the [FAVORITES] option above the designs.

➡ You only see designs marked as favorites in the list.

### 6.4.3 Deleting favorite marking

**Target:**

The following describes how to delete the marking as a favorite for a design.

**Requirement:**

- “Zünd Design Center” main window is open
- At least one design has been marked as a favorite

1. ➤ Click on the [Library] button .  
➡ A window is opened.
2. ➤ Activate the [FAVORITES] option above the designs.  
➡ Only designs marked as favorites are displayed.
3. ➤ Mark a design in the list.
4. ➤ Click on the [Delete] button.  
➡ The design is no longer marked as a favorite.

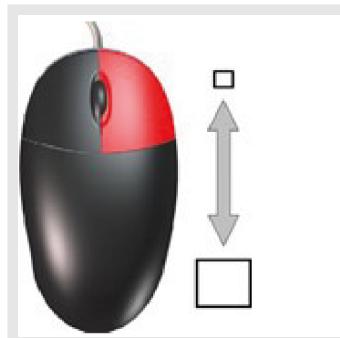
## 6.5 Controlling 3D view

### Target:

The following describes how to rotate, scale, and position the 3D model for scene management and camera positioning.

### Requirement:

- “Zünd Design Center” main window is open
  - Your own design or a design from a design template is open
    - ➡ [Chapter 6 “Operation” on page 24](#)
    - ➡ [Chapter 6.2 “Creating your own design” on page 25](#)
1. ➤ Transform the 3D model in the preview window of the “Zünd Design window” main window into the desired view.



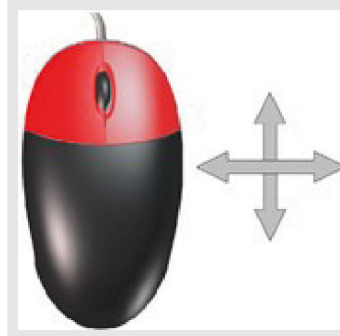
## Zoom design in/out

While holding down the right mouse button, move the mouse up and down.



## Rotate design

While holding down the left mouse button, rotate the 3D model to the desired 3D view.



## Position design

While holding down the left and right mouse buttons, position the 3D model in the desired position in the view window.

2. ➔ Save the desired view as a Scene or set the desired camera position.

➔ The desired view was set.

## 6.6 Materials

### 6.6.1 Managing material

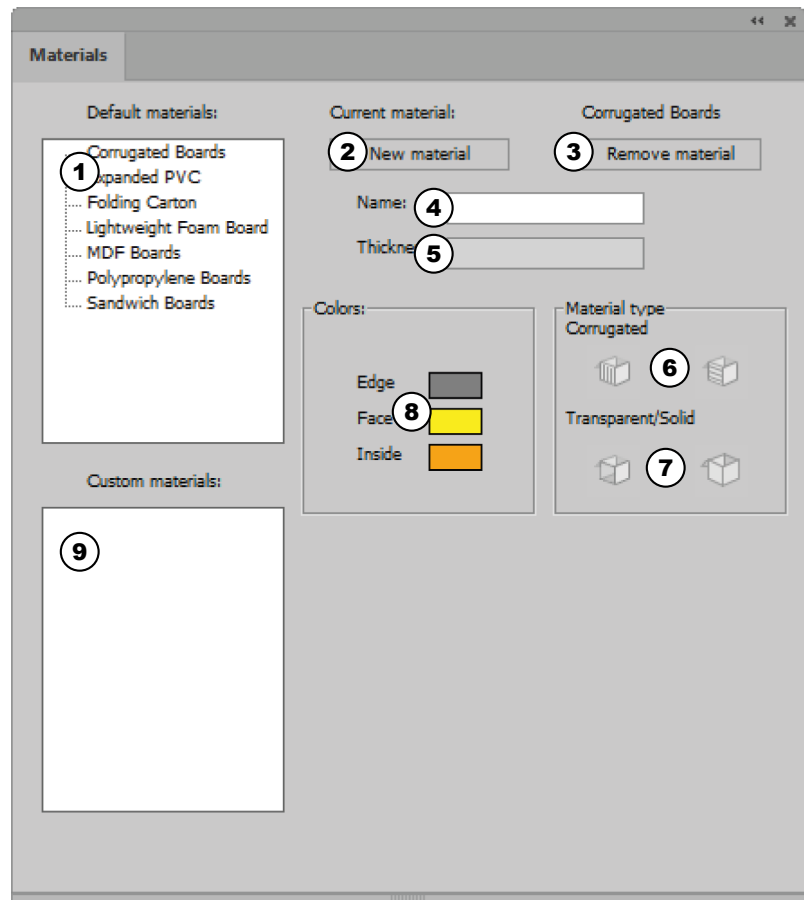



Fig. 5

- 1 Default materials
- 2 Add material
- 3 Delete material
- 4 Material name
- 5 Material thickness
- 6 Material type: Corrugated cardboard with longitudinal or transverse ridges
- 7 Material type: Transparent or solid
- 8 Color settings
- 9 Customer materials

In the [Materials] area , you can define and manage the materials and material properties. You can choose from the pre-installed default materials or add your own customer materials.

You can find the [Materials] area  under “Adobe Illustrator → Window → Zünd Design Center → Materials”.


### 6.6.2 Selecting material

**Target:**

The following describes how to assign the desired material to the open design.

**Requirement:**

- “Zünd Design Center” main window is open
- Your own design or a design from a design template is open
  - ➔ [Chapter 6 “Operation” on page 24](#)
  - ➔ [Chapter 6.2 “Creating your own design” on page 25](#)


1. Click on the [Materials] button .
  - ➔ A window is opened.
2. Select the desired material from the “Default materials” or “Customer materials” list.
3. Press the [Apply] button.
  - ➔ The desired material is selected.

### 6.6.3 Adding material

**Target:**

The following describes how to add individual materials to the “Customer materials” list.

**Requirement:**

- “Zünd Design Center” main window is open
1. Click on the [Materials] button .
    - ➔ A window is opened.
  2. In the “Default materials” list, mark the desired material.
  3. In the [Name] entry field, enter the desired material names.
  4. Set the desired settings on the added material.
    - ➔ [Chapter 6.6.4 “Processing material” on page 32](#)
  5. Click on the [Add material] button.
    - ➔ The new material is displayed in the “Customer materials” list.

### 6.6.4 Processing material


**Target:**

The following describes how to adjust customer materials to your individual requirements. The following settings are possible:



Material thick- ness	Display of the material thickness of the design. The material thickness is set in the <i>"Library"</i> window using the <i>"Parameter setting"</i> .
Light color (edges, outside, inside)	Setting of the color for the border (edge), the inside and outside (face) of the design
Corrugated cardboard (hori- zontal/vertical)	Indication of the corrugation direction for corrugated cardboard
Transparency	Activate the transparency for translucent materials

**Requirement:**

- *"Zünd Design Center"* main window is open
  - A customer material is created
1. Click on the [Materials] button .
    - ➔ A window is opened.
  2. Select a customer material.
    - ➔ [Chapter 6.6.2 "Selecting material" on page 32](#)
  3. Select the desired *"light color"* for the [edge], [outside] and [inside].
  4. For *"corrugated cardboard"*, click on the button of the desired corrugation direction to set the corrugation direction.
  5. For *"transparent/solid"*, click on the button of the desired setting, if necessary.
    - ➔ The material change has been edited.

## 6.6.5 Deleting material

**Target:**


The following describes how to delete materials that are not required from the *"Customer materials"* area.


**Requirement:**

- *"Zünd Design Center"* main window is open



*Pre-installed materials in the "Default materials" area cannot be deleted.*

1. Click on the [Materials] button .
  - ➔ A window is opened.
2. Mark the material to be deleted in the *"Customer materials"* list.

3.  Click on the [Remove material] button.
  - ➡ The material is deleted from the “*Customer materials*” list.

## 6.7 Setting light

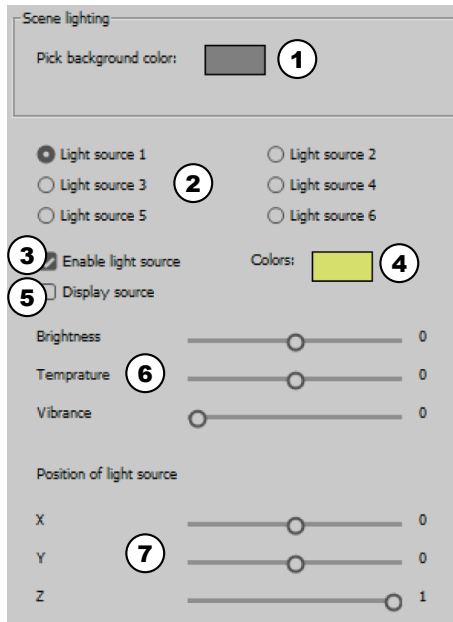



Fig. 6


- 1 Background color
- 2 Select light source
- 3 Activate and deactivate light source
- 4 Light colors
- 5 Display light source in preview window
- 6 Light parameters
- 7 Position of the light source in the preview window


### Target:

The following describes how to activate, deactivate and adjust the light sources for the presentation of the 3D model to the individual requirements.

You can optimize the presentation of the 3D model in the “Zünd Design Center” main window using light sources. By adjusting various light sources, you can change the mood of the model rendering in the 3D view in the preview window.


You can activate or deactivate the light using the [Enable light source] button  in the “Zünd Design Center” main window.

You can individually adjust the settings of the different light sources in the [Settings] area .

In the [Settings] area , you can activate and deactivate the different light sources and adjust the individual light settings for the presentation to the corresponding design.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

2. Select a background color for the preview window in the “Lighting settings” area.

3. Select a light source.

*! If multiple light sources are to be active, each light source must be activated separately.*

4. Activate the [light source].

5. Select a [light color].

6. ➤ Activate the display of the light source in the preview window, if desired.
  - The light source is shown in the preview window with a cross symbol in the selected light color.
7. ➤ Set the values for brightness, temperature, and ambiance of the light.
8. ➤ Set the position of the light source.
9. ➤ Repeat steps 3 – 8 for each additional light source selected.
  - The light sources are set.

## 6.8 Visual settings

### 6.8.1 Adjusting visual settings

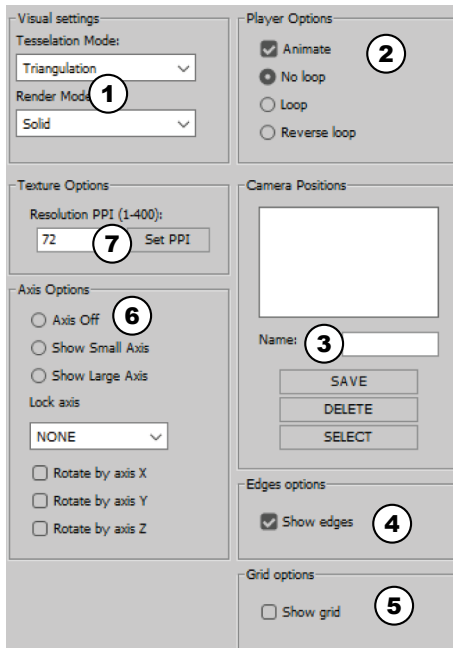


Fig. 7

- 1 "Visual settings" (model overlap and model representation)
- 2 "Player Options"
- 3 "Camera Positions"
- 4 "Edges options"
- 5 "Grid options"
- 6 "Axis Options"
- 7 "Texture Options"

You can change the view of the 3D model in the "Zünd Design Center" main window individually according to your wishes. The 3D model is displayed in the preview window according to the visual settings list.

You will find the "Visual settings" area under "Adobe Illustrator → Window → Zünd Design Center → Settings".


### 6.8.2 Setting representation variants

#### Target:

The following describes how to set the model overlap and model representation of the 3D model for presentation in the preview window.

#### Requirement:

- "Zünd Design Center" main window is open

1. Click on the [Settings] button .
  - ➡ A window is opened.
2. In the "Visual settings" area, select a model overlap from the drop-down list [Tessellation Mode].
3. From the [Render Mode] drop-down list, select a model representation.
  - ➡ The representation variant is set.


## 6.8.3 Setting the resolution

### Target:

The following describes how to set the resolution for the display of the 3D model.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

*i The resolution can be set from 1 – 400 ppi.*

– *The higher the set resolution value, the higher the resolution of the 3D preview and the required rendering time.*

2. In the “Texture Options” area, enter the desired resolution in the [Resolution PPI] entry field.

3. Click on the [Set PPI] button.

➡ The resolution is set.


## 6.8.4 Setting axes

### Target:

The following describes how to define the settings of the coordinate axes of the 3D model.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .

➡ A window is opened.

2. In the “Axis Options” area, set the desired display.

[Axis Off] Do not display any coordinate axes

[Show Small Axis] Show small coordinates axis

[Show Large Axis] Show large coordinates axis

3. From the [Lock axis] drop-down list, select the axis that should be locked.

4. Select the axis around which the 3D model should rotate.


➡ The axes are set.

## 6.8.5 Setting playback options

### Target:

The following describes how to define the animation settings of the 3D model.

**Requirement:**


- *“Zünd Design Center”* main window is open
- 1. ➤ Click on the [Settings] button .
  - ➡ A window is opened.
- 2. ➤ In the *“Player Options”* area, activate the [Animate] checkbox to switch on the animation.
- 3. ➤ Select the desired playback option.
  - [No loop]
  - [Loop]
  - [Reverse loop]
  - ➡ The playback options are set.

## 6.8.6 Saving camera positions

**Target:**

The following describes how to save the current model view in the preview window of the *“Zünd Design Center”* main window for quick re-display later.

**Requirement:**

- *“Zünd Design Center”* main window is open
- Your own design or a design created from a design template
  - ➡ [Chapter 6 “Operation” on page 24](#)
  - ➡ [Chapter 6.2 “Creating your own design” on page 25](#)
- 1. ➤ In the preview window of the *“Zünd Design Center”* main window, set the 3D model to the desired view.
  - ➡ [Chapter 6.5 “Controlling 3D view ” on page 29](#)
- 2. ➤ Click on the [Settings] button .
  - ➡ A window is opened.
- 3. ➤ In the *“Camera Positions”* area, enter the desired name in the [Name] entry field.
- 4. ➤ Click on the [Save] button.
  - ➡ The entered name is displayed in the *“Camera Positions”* list.





## 6.8.7 Deleting camera positions

**Target:**

The following describes how to delete a saved model view from the *“Camera Positions”* area.

**Requirement:**

- *“Zünd Design Center”* main window is open

1.  Click on the [Settings] button .  
➡ A window is opened.
2.  In the “*Camera Positions*” area, mark the desired view in the list.
3.  Click on the [Delete] button.  
➡ The view is deleted from the “*Camera Positions*” list.





## 6.8.8 Selecting camera positions

### Target:

The following describes how to select the saved model view for display in the preview window of the “*Zünd Design Center*” main window.

### Requirement:

- “*Zünd Design Center*” main window is open

1.  Click on the [Settings] button .  
➡ A window is opened.
2.  In the “*Camera Positions*” area, mark the desired view in the list.
3.  Click on the [Select] button.  
➡ The view is displayed in the preview window of the “*Zünd Design Center*” main window.




## 6.8.9 Showing edges

### Target:

The following describes how to show the edges of the design in the model view as a thin line in the preview window of the “*Zünd Design Center*” main window.

### Requirement:

- “*Zünd Design Center*” main window is open
- Your own design or a design created from a design template  
➡ [Chapter 6 “Operation” on page 24](#)  
➡ [Chapter 6.2 “Creating your own design” on page 25](#)

1.  Click on the [Settings] button .  
➡ A window is opened.
2.  In the “*Edges options*” area, activate the [Show edges] checkbox.  
➡ The edges are displayed in the model view.




### 6.8.10 Showing the grid

**Target:**

The following describes how to show a grid in the preview window of the *“Zünd Design Center”* main window.

**Requirement:**

- *“Zünd Design Center”* main window is open

1. Click on the [Settings] button .
  - ➡ A window is opened.
2. In the *“Grid options”* area, activate the [Show grid] checkbox.
  - ➡ The grid is displayed.

## 6.9 Setting folding parameters

### Target:

The following describes how to set the folding settings of the animation of the 3D model in the preview window of the “Zünd Design Center” main window.

The animation of the fold preview can be individually set for each path of the “Crease” and “V-cut” layers. You can set the sequence of the folding and the angle of the folding surfaces via the folding settings.

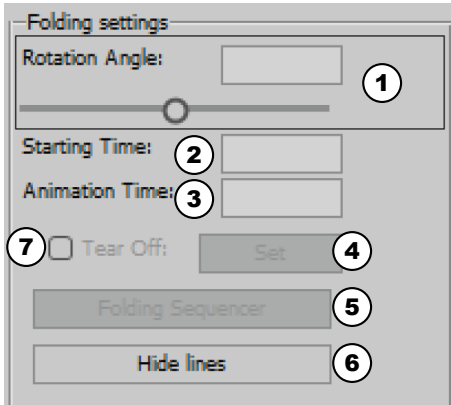


Fig. 8


- 1 Define [rotation angle]
- 2 [Starting time] of the animation in seconds
- 3 [Animation time] in seconds
- 4 [Confirm] button
- 5 Open [folding sequence] menu
- 6 [Hide lines] button
- 7 Tear the material along the selected path

### Requirement:

- “Zünd Design Center” main window is open
- Your own design or a design created from a design template
  - ➔ [Chapter 6 “Operation” on page 24](#)
  - ➔ [Chapter 6.2 “Creating your own design” on page 25](#)



*Only the paths of the “Crease” and “V-cut” layers can be set with individual folding parameters.*

1. In the Adobe Illustrator file, mark the desired path.
2. Click on the [Settings] button .
  - ➔ A window is opened.

*i If you do not change the preset rotation angle, all folds will be made simultaneously at a 90° angle.*

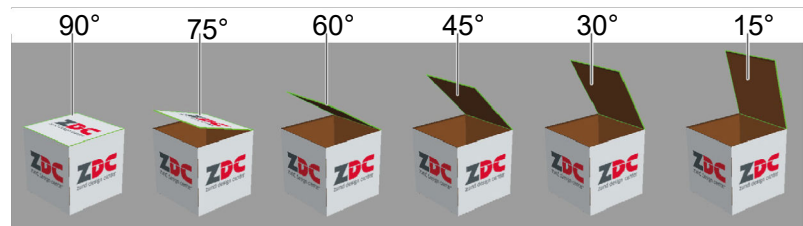


Fig. 9

3. In the “Folding settings” area, set the desired [rotation angle] for the marked path.
4. Enter the [starting time] of the animation in seconds.
5. Enter the [animation time] in seconds.
6. Activate the [Tear Off] checkbox if the material should be torn along the selected path.
7. Click on the [Folding Sequencer] button.  
➔ The “Folding Sequencer” window is displayed.
8. Enter the desired folding sequence values.
9. Click on the [Hide lines] button if the overlap of construction, bending, V-cut, and intersection lines should be displayed with a white area.
10. Click on the [Confirm] button  
➔ The fold settings made for the marked path are saved.

## 6.10 Joining paths

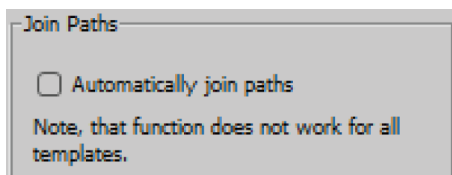


Fig. 10

### Target:


The following describes how to join paths automatically. Activate the function before opening the design.


Designs with joined paths shorten the processing time and increase the processing quality, since the tool has to be lifted and lowered less frequently. Closed paths only can also be nested.

For some designs, the paths must not be closed for correct production, such as for cutout flaps. The function is not effective there.

### Requirement:

- “Zünd Design Center” main window is open

1. Click on the [Settings] button .  
➔ A window is opened.
2. In the “Join Paths” area, activate the [Automatically join paths] checkbox.




3.  Open the desired design.
  - ➡ Open paths in the design are joined.

## 6.11 Controlling the 3D animation

### Target:

The following describes how to control the animation of the 3D model in the preview window of *"Zünd Design Center"*.

### Requirement:

- *"Zünd Design Center"* main window is open
  - Your own design or a design created from a design template
    - ➔ [Chapter 6 "Operation" on page 24](#)
    - ➔ [Chapter 6.2 "Creating your own design" on page 25](#)
1. Click on the [Update] button .
    - ➔ The animation is updated.
  2. Click on the [Reset] button .
    - ➔ The animation is reset.
  3. Click on the [Player] button .
    - ➔ The *"Player"* window for individual control of the animation is opened.


## 6.12 Exporting the design

### 6.12.1 Defining a HotFolder

#### Target:

The following describes how to define a folder as a HotFolder. A HotFolder is needed for exporting \*.ai.

#### Requirement:

- *"Zünd Design Center"* main window is open
1. Click on the [Export] button .
    - ➔ A window is opened.
  2. Click on the [Set HotFolder] button to set a HotFolder.
    - ➔ The Windows prompt *"Select path"* is displayed.
  3. Select a HotFolder and confirm this with [Select folder].
    - ➔ The folder is defined as a HotFolder.





### 6.12.2 Sending a design to a HotFolder as AI

#### Target:

The following describes how to send an Adobe Illustrator file to the HotFolder.

#### Requirement:

- *"Zünd Design Center"* main window is open
- A HotFolder is defined

1.  Save the ZDC project locally.
2.  Click on the [Export] button 
  - ➡ A window is opened.
3.  Click on the [Send .ai to HotFolder] button.
4.  Set the Illustrator options and confirm them with [Ok].
  - ➡ The design is sent to the HotFolder.







### 6.12.3 Exporting to the PNG format

**Target:**

The following describes how to export the design to the PNG format.

**Requirement:**

- “Zünd Design Center” main window is open

1.  Position the design as desired.
2.  Click on the [Export] button 
  - ➡ A window is opened.
3.  In the drop-down list, select the “PNG” format.
4.  Click on [Save].
5.  Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.





### 6.12.4 Exporting to the 3D PDF format

**Target:**

The following describes how to export the design to the 3D PDF format.

**Requirement:**

- “Zünd Design Center” main window is open

1.  Position the design as desired.
2.  Click on the [Export] button 
  - ➡ A window is opened.
3.  In the drop-down list, select the “3D PDF” format.

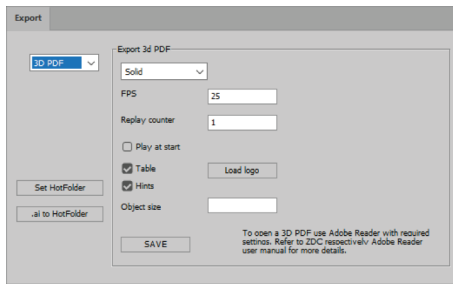


Fig. 11

4. Define the export parameters:
 

Selection	"Solid model" or "wireframe model"
[FPS] (frames per second)	Frame rate of the animation
[Replay counter]	Number of repetitions of the animation
[Play at start]	Start animation upon opening
[Table]	Insert table with basic information
[Hints]	Insert control information
[Load logo]	Load and insert logo
[Object size]	Insert length x width x height as information on the size of the object

5. Click on [Save].

6. Select a path and confirm this with [Save].

➡ The design is exported to the desired format.



*Always open a 3D PDF with the "Adobe Reader" program and activate playback of 3D contents.*

- "Adobe Reader → Edit → Default settings... → 3D & Multimedia → Activate playback of 3D contents"

### 6.12.5 Exporting to the DAE format

**Target:**

The following describes how to export the design to the DAE format.

**Requirement:**

- "Zünd Design Center" main window is open








1. Position the design as desired.
2. Click on the [Export] button .
  - ➡ A window is opened.
3. In the drop-down list, select the "DAE" format.
4. Click on [Save].
5. Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.

### 6.12.6 Exporting to the MP4 format

**Target:**

The following describes how to export the design to the MP4 format.

**Requirement:**







- “Zünd Design Center” main window is open
- 1.  Position the design as desired.
- 2.  Click on the [Export] button .
  - ➡ A window is opened.
- 3.  In the drop-down list, select the “MP4” format.
- 4.  Define the export parameters:
  - [Start time]
  - [End time]
  - [Frame rate]
- 5.  Click on [Save].
- 6.  Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.

#### 6.12.7 Exporting to the OBJ format

**Target:**

The following describes how to export the design to the OBJ format.

**Requirement:**





- “Zünd Design Center” main window is open
- 1.  Position the design as desired.
- 2.  Click on the [Export] button .
  - ➡ A window is opened.
- 3.  In the drop-down list, select the “OBJ” format.
- 4.  Click on [Save].
- 5.  Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.

#### 6.12.8 Exporting to the STL format

**Target:**

The following describes how to export the design to the STL format.

**Requirement:**

- “Zünd Design Center” main window is open
- 1.  Position the design as desired.
- 2.  Select the [Export] button .
  - ➡ A window is opened.
- 3.  In the drop-down list, select the “STL” format.



4. ➤ Click on [Save].
5. ➤ Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.

#### 6.12.9 Exporting to the ZCC format

**Target:**


The following describes how to export the design to the ZCC format.

**Requirement:**

- “Zünd Design Center” main window is open



*When exporting from ZDC to the ZCC format, the artboard is interpreted as the material size.*

1. ➤ Position the design as desired.
2. ➤ Click on the [Export] button .
- ➡ A window is opened.
3. ➤ In the drop-down list, select the “ZCC” format.
4. ➤ For “ZCC export”, select the material type in the drop-down list.
5. ➤ Click on [Save].
6. ➤ Select a path and confirm this with [Save].
  - ➡ The design is exported to the desired format.

## 7 Tips and tricks

### 7.1 Adapting the design contour

**Target:**

The following describes how to adapt the design contour on the basis of an existing design.

1. ➤ Open the desired design from the design catalog.



Fig. 12

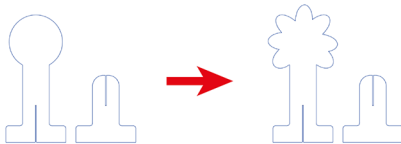


Fig. 13

2. ➤ Change to the corresponding layer in Adobe Illustrator.
3. ➤ Adapt the paths in the desired layers.

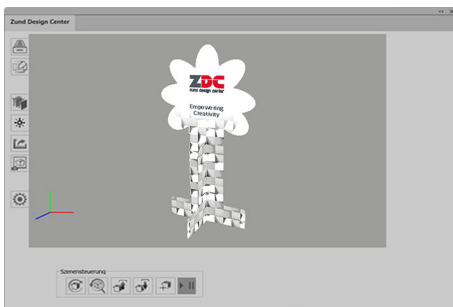


Fig. 14

4. ➤ Check the change.  
➡ An existing design was adapted.

## 7.2 Placing design elements

### Target:

The following describes how to design the external and internal surface areas of packaging. You can present the design as a video or 3D PDF or directly produce it.

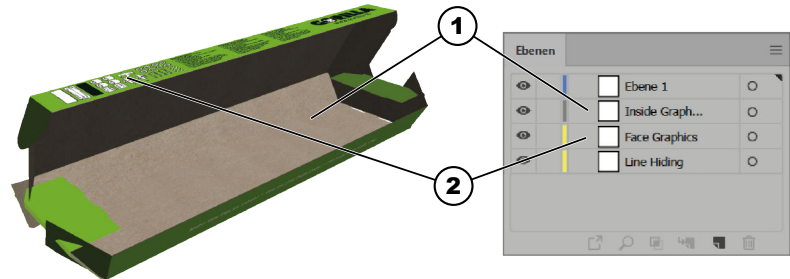


Fig. 15

- 1 Inside graphics (interior)
- 2 Face graphics (exterior)

### *Designing the outer shell*

1. ➤ Activate the *“Face graphics”* layer.
2. ➤ Activate other layers such as *“Crease”* or *“Thru-cut”*.
  - ➡ The paths along which the cutting or folding is done are visible.
3. ➤ On the *“Face graphics”* layer, place texts, logos, images etc.
  - ➡ The outer shell of the box is designed.

### *Designing the inside*

4. ➤ Activate the *“Inside graphics”* layer.
5. ➤ Activate other layers such as *“Crease”* or *“Thru-cut”*.
  - ➡ The paths along which the cutting or folding is done are visible.
6. ➤ On the *“Inside graphics”* layer, place texts, logos, images etc.
  - ➡ The inside of the box is designed.

## 7.3 Creating cut-outs

### Target:

The following describes how to design cutouts in packaging.

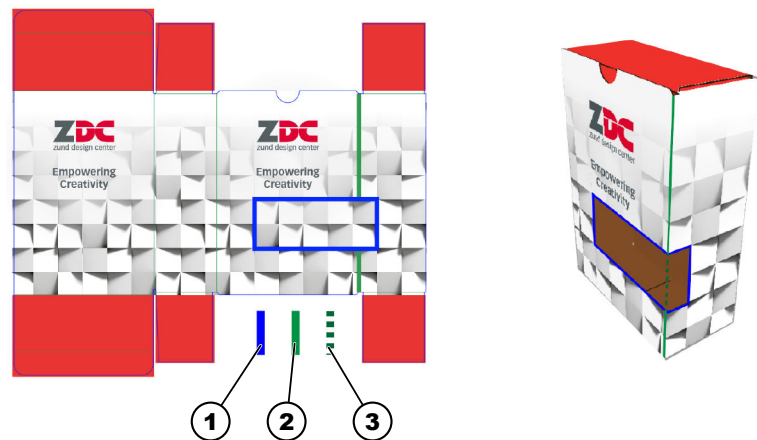


Fig. 16

- 1 Path of the “Thru-cut” layer
- 2 Path of the “Crease” layer
- 3 Path of the “Crease” layer from cutout

1. ➤ Open a design in which you wish to create a cutout.
2. ➤ Activate the “Thru-cut” layer.
3. ➤ Create the paths in the “Thru-cut” layer for the cutout.  
➡ A cutout was created in the box.

## 7.4 Creating a 3D animation from multiple cut shapes

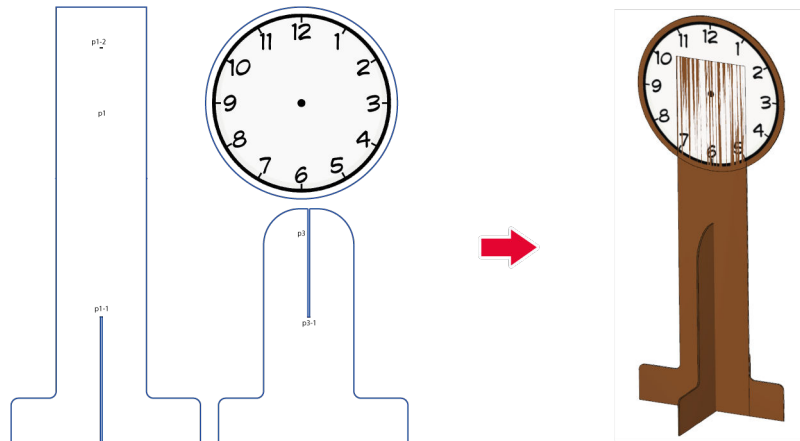


Fig. 17

### Target:

The following describes how to create an animated 3D graphic from a 2D design. A standee for displaying the next presentation time is used as an example.




*Move the open window of the “Zünd Design Center” to a second screen to quickly access the functions while editing the design in Adobe Illustrator.*



*You can select markers as follows:*


- *Click in the selection column for the marker layer in the layer control panel.*
- *Select the marker on the working area of Adobe Illustrator.*

### Requirement:

- “Zünd Design Center” main window is open
- [Settings] window  is open
- Design has been created
- Cut paths are assigned the “Thru-cut” method

### Naming cut shapes

1.  Remove the groupings of the design.

2.  Activate the “Draw” method.

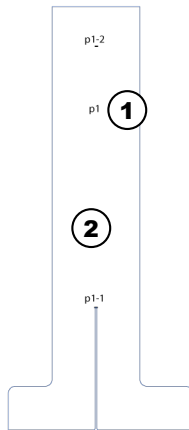


Fig. 18

- 1 Name of the cut shape
- 2 Base cut shape

### Adding markers

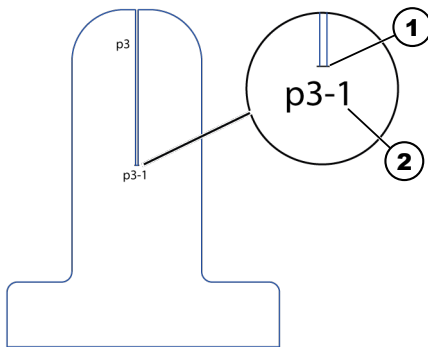


Fig. 19

- 1 Marker
- 2 Marker name

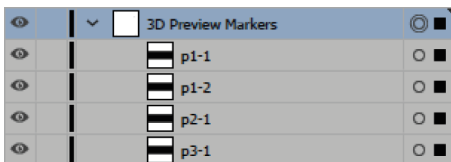


Fig. 20

3. ➔ Drag a text field onto the base cut shape of the design and label it "p1".
4. ➔ Drag other text fields onto any cut shape of the design and label them "p2", "p3" and so on.  
➔ The cut shapes have been named.

5. ➔ Activate the "3D Preview Markers" method in the layer control panel.

*i The marker must overlap the connection lines of the cut shapes that are to be connected.*

6. ➔ Manually create a marker at any connection line of the cut shapes by drawing a black line over the connection line.

7. ➔ In the "layers", double-click on the created marker and rename it like the cut shape names:
  - Marker 1 on cut shape "p1" as "p1-1".
  - Marker 2 on cut shape "p1" as "p1-2".
  - Marker 1 on cut shape "p2" as "p2-1".
  - Marker 1 on cut shape "p3" as "p3-1".

## Defining markers of the base shape

Fig. 21

## Connecting markers of different cut shapes

Fig. 22

Fig. 23

8. Select marker "p1-1".

9. Under "Settings → Positioning settings" enter the marker settings.

[ID:] "p1-1"

[Type:] "Absolute" to define the base cut shape

Rotation angle [Y:] 180°

*! If the rotation angle of the Y-axis is set to 180°, the cut shape is rotated 180° along the Y-axis.*

10. Click on [Apply].

➡ The marker of the base cut shape is now saved.

11. Select marker "p2-1".

12. Under "Settings → Positioning settings" enter the marker settings.

[ID:] "p2-1"

[Type:] "Relative"

[Relative to:] "p1-2"

Rotation angle of all axes 0°

➡ Marker "p2-1" is aligned with marker "p1-2".

*! If the rotation angle of all axes is set to 0°, the cut shape is not rotated.*

13. Click on [Apply].

➡ The marker is now saved.

14. Select marker "p3-1".

15. Under "Settings → Positioning settings" enter the marker settings.

[ID:] "p3-1"

[Type:] "Relative"

[Relative to:] "p1-1"

Rotation angle of all axes 90°

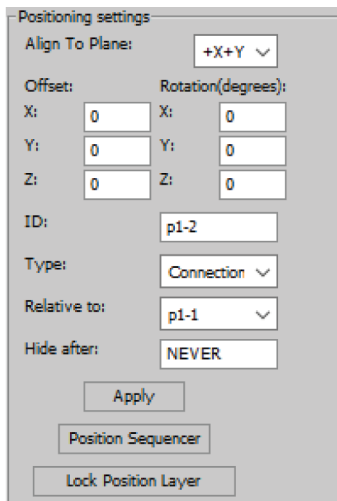
➡ Marker "p3-1" is aligned with marker "p1-1".

*! If the rotation angle of all axes is set to 90°, the cut shape is rotated 90° along all axes.*

16. Click on [Apply].

➡ The marker is now saved.

### Defining markers of the same cut shapes



The image shows a 'Positioning settings' dialog box. It has the following fields and controls:

- Align To Plane:** A dropdown menu with '+X+Y' selected.
- Offset:** Three input fields for X, Y, and Z, each with a value of '0'.
- Rotation(degrees):** Three input fields for X, Y, and Z, each with a value of '0'.
- ID:** A text input field containing 'p1-2'.
- Type:** A dropdown menu with 'Connection' selected.
- Relative to:** A dropdown menu with 'p1-1' selected.
- Hide after:** A dropdown menu with 'NEVER' selected.
- Buttons:** 'Apply', 'Position Sequencer', and 'Lock Position Layer'.

Fig. 24

### Showing and exporting the 3D graphic

17. Select marker "p1-2".

18. Under "Settings → Positioning settings" enter the marker settings.


[ID:]	"p1-2"
[Type:]	"Connection"
[Relative to:]	"p1-1"
Rotation angle of all axes	0°

➔ Marker "p1-2" is aligned with marker "p1-1".

**i** If the rotation angle of all axes is set to 0°, the cut shape is not rotated.

19. Click on [Apply].


➔ The marker is now saved.

20. Click on the [Update] button .

➔ The 3D graphic is loaded and displayed in the display window.

21. Rotate the 3D graphic to the desired position.

➔ [Chapter 6.5 "Controlling 3D view" on page 29](#)

22. Click on the [Export] button .

➔ A window is opened.

23. In the drop-down list, select the "3D PDF" format.

24. Define the export parameters and save the 3D PDF file.

➔ [Chapter 6.12.4 "Exporting to the 3D PDF format" on page 46](#)

➔ The design is exported to the desired format.

➔ The 3D animation has been created.



*If the 3D graphic is exported as a PDF document, the PDF document must be accepted as "trustworthy" in Adobe Reader. 3D graphics are only displayed in PDF documents that are defined as trustworthy.*



## 7.5 Positioning settings for 3D animations

The screenshot shows the 'Positioning settings' dialog box. It contains the following elements:
 

- Align To Plane:** A dropdown menu set to '+X+Y'.
- Offset:** A section with three input fields for X, Y, and Z, each set to '0'.
- Rotation(degrees):** An input field set to '0'.
- ID:** An input field containing 'p1-1'.
- Type:** A dropdown menu set to 'Absolute'.
- Relative to:** A dropdown menu set to 'NONE'.
- Hide after:** A dropdown menu set to 'NEVER'.
- Buttons:** 'Apply', 'Position Sequencer', and 'Lock Position Layer'.

 Numbered callouts are placed over the dialog:
 

- 1:** Points to the 'Rotation(degrees)' input field.
- 2:** Points to the 'ID' input field.
- 3:** Points to the 'Apply' button.
- 4:** Points to the 'Position Sequencer' button.
- 5:** Points to the 'Lock Position Layer' button.

Using the positioning settings, you can convert 2D designs into animated 3D graphics.

You will find the [Positioning settings] area under “*Adobe Illustrator* → *Window* → *Zünd Design Center* → *Settings*”.

Fig. 25

Settings		Description
(1) Axis settings	[Align To Plane]	Select axes for the alignment of the 3D graphic.
	“Offset”	[Z], [Y], [X]: Define value in mm by which the 2D cut shape is to be moved on the corresponding axis.
	“Rotation (degrees)”	[Z], [Y], [X]: Define angle by which the 2D cut shape is to be rotated on the corresponding axis.
(2) Marker settings	[ID]	Enter the marker name that is to be assigned.
	[Type]	Define the connection type of the marker: [Absolute]: Define the base cut shape [Relative]: Connection of markers of different cut shapes [Connection]: Connection of markers of the same cut shapes
	[Relative to]	Define the marker which is to be referenced.
	[Hide after]	Enter the cut shape that is to be in front.
(3) [Apply]		Save and apply the defined axis settings and marker settings.
(4) [Position Sequencer]		Open settings for the sequences of the animation sequence. At least two sequences must be defined.

Settings		Description
	[Time]	Define the time in milliseconds [ms] by which the entered sequence is to be reached.
	Axis settings	Left column [Z], [Y], [X]: Define angle by which the 2D cut shape is to be rotated on the corresponding axis.  Right column [Z], [Y], [X]: Define value in [mm] by which the 2D cut shape is to be moved on the corresponding axis.
	[View Sequence]	View sequence setting
	[Add Sequence]	Add a new sequence
	[Reset]	Reset settings
	[Close]	Close the window. To view the animation in the main window, the window must be closed.
(5) [Lock Position Layer]		Lock marker in the layer position for editing.

