

ARCHLine.XP[®] 2010

New Features

Release 2

Information in this document is subject to change without notice and does not represent a commitment on the part of CadLine. The software, which includes the information contained in any databases, described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of the agreement. It is against the law to copy the software on any medium except as specifically allowed in the license or nondisclosure agreement. The licensee (purchaser) may make one copy of the software for the purpose of creating a backup copy. No part of this manual may be reproduced, transmitted, transcribed, or translated into any language in any form or by any means, without the express written permission of CadLine.

2010. CadLine. All rights reserved.

In no event shall CadLine be liable for special, indirect or consequential damages in connection with or arising from the use of this document or any programs contained herein.

Microsoft, MS, and MS-DOS are registered trademarks and *Windows* is a trademark of *Microsoft Corporation*.

ARCHLine.XP[®] is a trademark of CadLine.

This manual was produced using *Microsoft Word* and *ARCHLine.XP*[®].

Contents

1.	Indoor module	5
2.	Wardrobe wizard	6
	2.1. Wardrobe corpus	6
	2.2. Preview panel	19
	2.3. Wardrobe configuration.....	20
3.	Furniture from Manufacturers	25
	3.1. Object browser	26
	3.2. Browsing objects.....	29
	3.3. Good to know.....	31
4.	Roman blind wizard	32
	4.1. Roman blind wizard parameters	32
	4.2. Change an existing roman blind.....	34
5.	Object by photo	35
	5.1. How to create an object by photo?.....	35
	5.2. Create object by Photo dialog.....	39
6.	3DTV module	41
	6.1. Start/Stop 3DTV.....	41
	6.2. Configure 3DTV	42
7.	Layer management developments	43
	7.1. Layer toolbar	43
	7.2. Layer Walk tool	43
	7.3. Using layer walk.....	45
8.	Insert 3D model into photographic background	47
	8.1. How to use the new Estimation method.....	47
9.	Improvements.....	56
	9.1. Curtain Wizard and Table Cloth Wizard markers.....	56
	9.2. Properties marker	57
	9.3. Room book.....	58
	9.4. 3D Objects	58
	9.5. Design center.....	59
	9.6. User interface.....	60
	9.7. Stair	60
	9.8. Wall reference line	60

9.9.	Roof – Edit layers.....	60
9.10.	Roof structure – representation by centerline	62
9.11.	Slab – Layer visibility	62
9.12.	Light sources – compatibility improvement	63
9.13.	Light sources – Intensity falloff.....	63
9.14.	Light sources - Selection.....	63
9.15.	Export / Import – Sketchup materials, lights and Artlantis export enhancements.....	64
9.16.	Dimension – new markers.....	64
9.17.	Section properties – Item types for applying section linewidth	65
9.18.	Legend of materials	65
9.19.	Text find and replace	66
9.20.	Mouse handling: Long click mode can be switched off	67

1. Indoor module

ARCHLine.XP® 2010 R2 gathers all indoor tools in one single module.

Indoor tools		Registration
Construction grid		Picture on wall
Terrain		Curtain
Concept 3D		Roman Blind
Survey		Table cloth
Structural		Furniture from Manufacturers
Light		Wardrobe wizard
Accessories		Wardrobe Legend

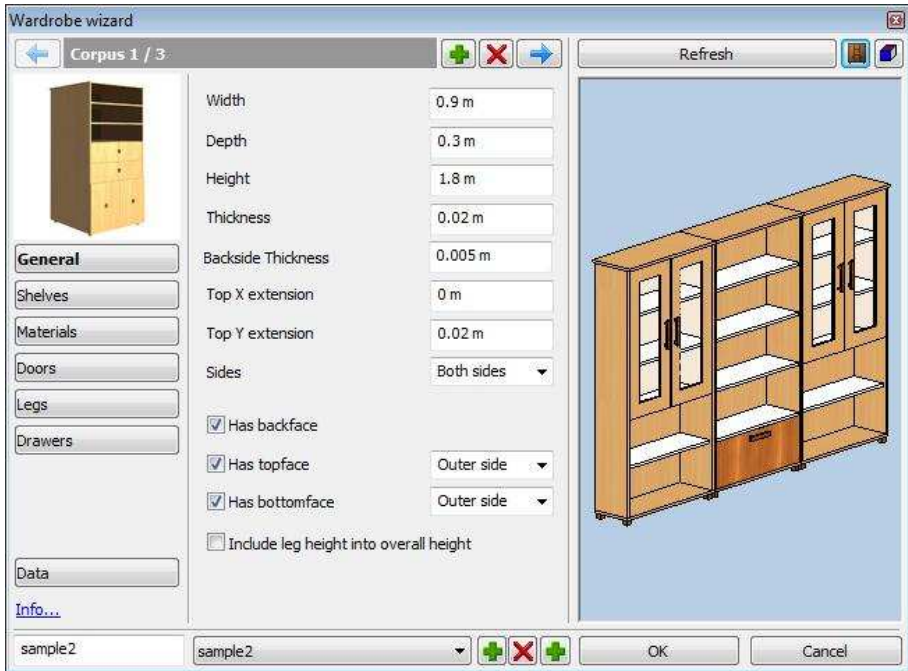
Indoor module contains the following tools:

1. Picture on wall
2. Curtain
3. Roman blind
4. Table cloth
5. Furniture from Manufacturers
6. Wardrobe wizard
7. Wardrobe legend

The Indoor module is a built-in part of ARCHLine.XP 2010 R2 Interior, Standard and Professional versions. The module is also available for other software versions as an add-on.

2. Wardrobe wizard

ARCHLine.XP® 2010 R2 introduces a new tool for modelling wardrobes, drawers, cabinets and more. The new wizard helps you configuring the desired furniture in minutes. Finally, you can place it on your drawing and save it into the object library at the same time.



The wizard helps you creating wardrobe, add and remove corpus to it, and also you can save your settings into configuration file.

2.1. Wardrobe corpus

The wardrobe corpus can be edited at the left area of the wardrobe wizard interface.

2.1.1. Corpus pane

The corpus pane helps you navigate from one wardrobe corpus to another.



2.1.1.1. Add corpus button

Use the add corpus button on the corpus pane to add a new corpus.

2.1.1.2. Remove corpus button

Use the remove corpus button to remove the active corpus. The last corpus cannot be removed as there should at least one remain.

2.1.1.3. Navigation arrows

Use left and right navigation buttons to switch to the next corpus to edit it or just see its properties.

2.1.2. General page

In the Wardrobe wizard click on the General button to access the general settings page. Here you can set the most common parameters of the wardrobe.

2.1.2.1. Width

Set the full width of the actual corpus here.

2.1.2.2. Depth

Set the full depth of the actual corpus here.

2.1.2.3. Height

Set the full height of the actual corpus here.

2.1.2.4. Thickness

Set the thickness of the wardrobe board here.

2.1.2.5. Backside thickness

The backside thickness can be changed separately from overall board thickness here.

2.1.2.6. Top X extension

Top X extension will create an offset to the direction of width on the top surface with the given value. Negative value can be used as well as positive one.

2.1.2.7. Top Y extension

Top Y extension will create an offset to the direction of depth on the top surface with the given value. Negative value can be used as well as positive one.

2.1.2.8. Sides

In the sides combobox you can select from several options to set sides of the wardrobe. The options are the following:

- ❖ Both sides
- ❖ Left side
- ❖ Right side

2.1.2.9. Has backface

Backface can be enabled or disabled by the "*Has backface*" option.

2.1.2.10. Has topface

Topface can be enabled or disabled by the "*Has topface*" option.

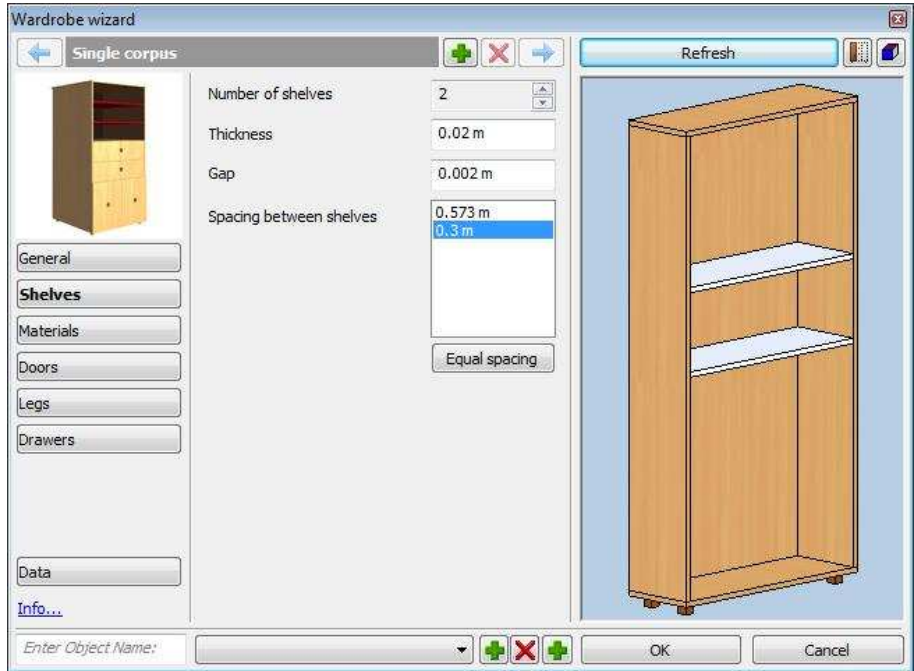
2.1.2.11. Has bottomface

Bottomface can be enabled or disabled by the "*Has bottomface*" option.

2.1.2.12. Include leg height into overall height

2.1.3. Shelves page

Click on the Shelves button in the Wardrobe wizard to enable shelves and set the settings of them.



2.1.3.1. Number of shelves

Use the spin buttons or enter a value to set the number of shelves.

2.1.3.2. Thickness

You can set the thickness of a shelf board here.

2.1.3.3. Gap

Set the gap between the door panel plane and the edge of the shelves.

2.1.3.4. Spacing between shelves

Set the spacing between shelves by changing the value here. Double click on the value to change it. The first reference plane is the top of the corpus. If there is more

than one shelf then the 2nd and other shelves' positions are measured from the bottom plane of the previous ones.

2.1.3.5. Equal spacing

Press equal spacing to set it to all the actually existing shelves.

2.1.4. Materials page

Click on the Materials button in the Wardrobe wizard to change materials.



2.1.4.1. Wardrobe material

You can set material for main parts of one corpus in one single step like side panels, vertical separators, backpanels, etc. All other part's materials can be set by the following settings.

2.1.4.2. Top material

You can set the material for the top panel of the active corpus.

2.1.4.3. Bottom material

You can set the material of the bottom panel of the active corpus.

2.1.4.4. Shelf material

You can set the material of all shelves of the active corpus.

2.1.4.5. Door frame material

If the frame is set for the door on the Doors or Drawers page then the material set here will be applied on it. Otherwise the whole door material will have the material set here.

2.1.4.6. Door inlay material

If the frame is set for the door on the Doors or Drawers page then the material set here will be applied inside the framing. Otherwise the material set here will be invisible.

2.1.4.7. Leg material

When legs are enabled on the Legs page this material will be applied.

2.1.4.8. Plank material

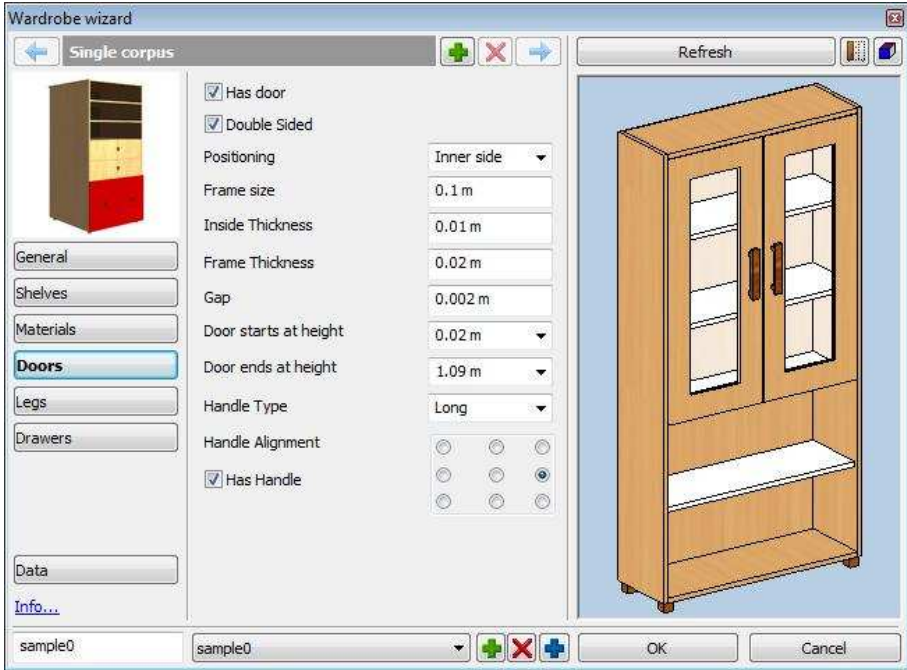
When plank is enabled on the Legs page this material will be applied.

2.1.4.9. Handle material

You can set the handle material. Handle can be enabled on Doors and Drawers pages.

2.1.5. Doors page

Click on the Doors button in the Wardrobe wizard to set doors.



2.1.5.1. Has door

You can enable or disable doors for the wardrobe

2.1.5.2. Double sided

Set this option enabled to have a double sided door. If this option is disabled then a single door will be applied.

2.1.5.3. Positioning

In positioning you can select an option between Inner side and Outer side. Inner side will place the door panel inside the side, top and bottom panels of a wardrobe. Outer side will place the door outside the side, top and bottom panels of a wardrobe and will also enlarge it.

2.1.5.4. Frame size

Set the frame size different from zero to enable framing for the door.

2.1.5.5. Inside thickness

When framing is enabled the visual inlay will have the thickness set here.

2.1.5.6. Frame thickness

The door panel thickness or when it is enabled, the framing thickness can be set here.

2.1.5.7. Gap

You can set a gap around the door panel. The door size will be reduced by this value.

2.1.5.8. Door starts at height

You can define the start level of the door. The value is measured from the top of the active corpus.

2.1.5.9. Door ends at height

You can define the end level of the door. The value is measured from the bottom of the active corpus.

2.1.5.10. Handle type

You can choose from the following handles: Round, KLIP, Long, Sphere

2.1.5.11. Handle alignment

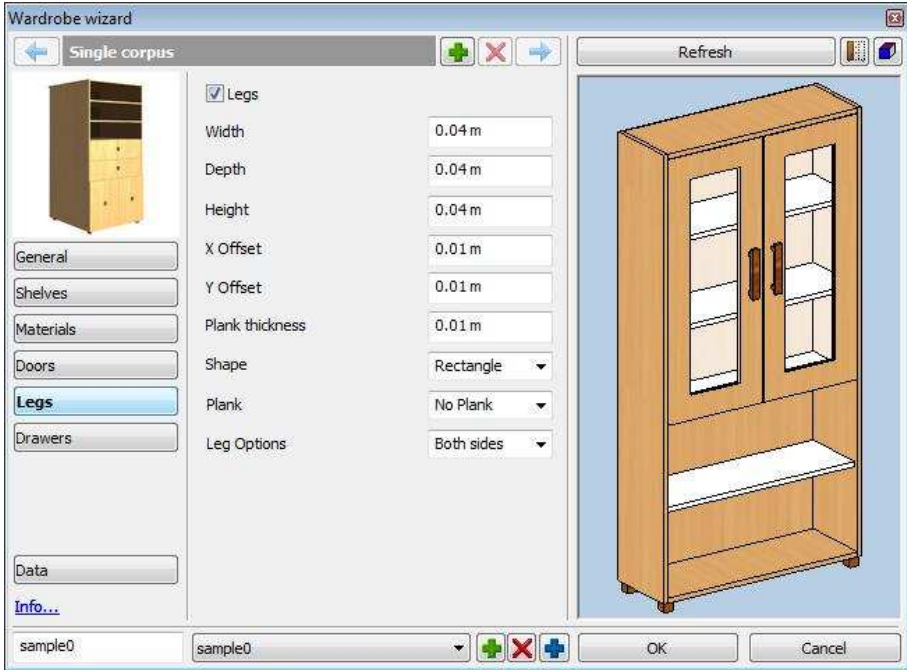
Set the position of the handle by using the 9-point alignment grid.

2.1.5.12. Has handle

This option enables / disables handle on the door.

2.1.6. Legs page

Click on the Legs button in the Wardrobe wizard to set legs.



2.1.6.1. Legs

This option enables / disables the legs of the wardrobe.

2.1.6.2. Width

You can set the width of the legs here.

2.1.6.3. Depth

You can set the depth of the legs here.

2.1.6.4. Height

You can set the height of the legs here.

2.1.6.5. X Offset

You can set the offset measured from the two side edges of the active corpus.

2.1.6.6. Y Offset

You can set the offset measured from the front and back edges of the active corpus.

2.1.6.7. Plank thickness

You can set the thickness of the plank, if it is enabled.

2.1.6.8. Shape

You can set the shape of the legs. The following options you can choose:

- ❖ Rectangle
- ❖ Circle

2.1.6.9. Plank

You can set plank by selecting an option here. The following options you can choose:

- ❖ No Plank
- ❖ Front Plank
- ❖ Front and Right Plank
- ❖ Front and Left Plank
- ❖ U-Shaped Plank.

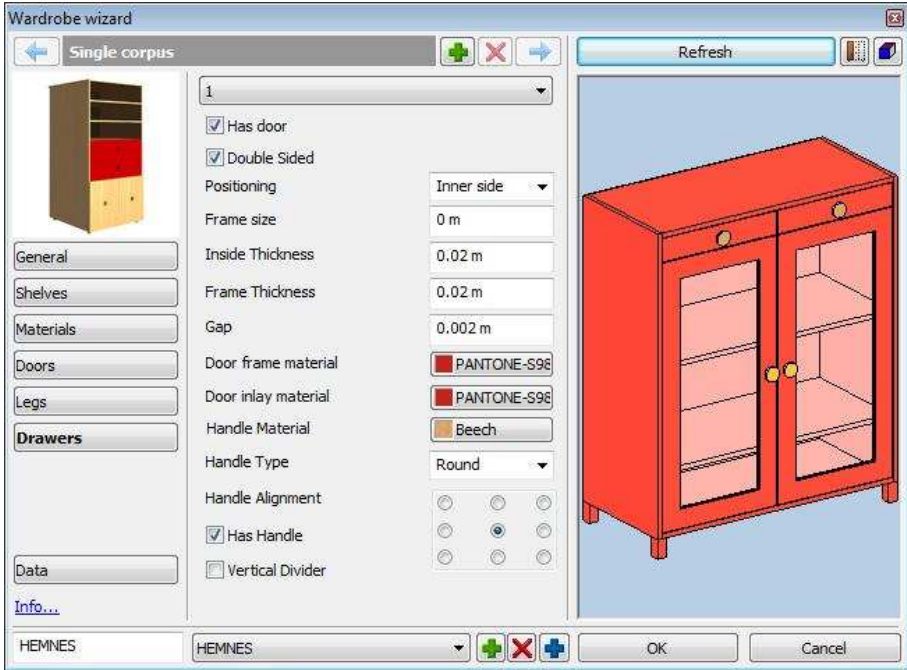
2.1.6.10. Leg Options

When legs are enabled, you can set the pattern of legs here. The following options you can choose:

- ❖ Both sides
- ❖ Left side
- ❖ Right side.

2.1.7. Drawers page

Click on the Drawers button in the Wardrobe wizard to set drawers.



2.1.7.1. Shelf list

If you defined shelves before on Shelves page here you can select which part you would like to convert into drawer. If you hadn't define any shelf before this page will be blank.

2.1.7.2. Has door

You can enable or disable doors / front panels for the shelf.

2.1.7.3. Double sided

Set this option enabled to have a double side door / front panel. If this option is disabled then a single door / frontal panel will be applied.

2.1.7.4. Positioning

In positioning you can select an option between "Inner side" and "Outer side". "Inner side" will place the frontal panel inside the side, top and bottom panels of a wardrobe. "Outer side" will place the frontal panel outside the side, top and bottom panels of a wardrobe and will also enlarge it.

2.1.7.5. Frame size

Set the frame size different from zero to enable framing for the door / frontal panel.

2.1.7.6. Inside thickness

When framing is enabled the visual inlay will have the thickness set here.

2.1.7.7. Frame thickness

The door panel thickness or when it is enabled, the framing thickness can be set here.

2.1.7.8. Gap

You can set a gap around the panel. The panel size will be reduced by this value.

2.1.7.9. Door frame material

You can set the door / frontal panel frame material here.

2.1.7.10. Door inlay material

You can set the door / frontal panel material.

2.1.7.11. Handle material

You can set the handle material.

2.1.7.12. Handle type

You can choose from the following handles:

- ❖ Round
- ❖ KLIP
- ❖ Long
- ❖ Sphere

2.1.7.13. Handle alignment

Set the position of the handle by using the 9-point alignment grid.

2.1.7.14. Has handle

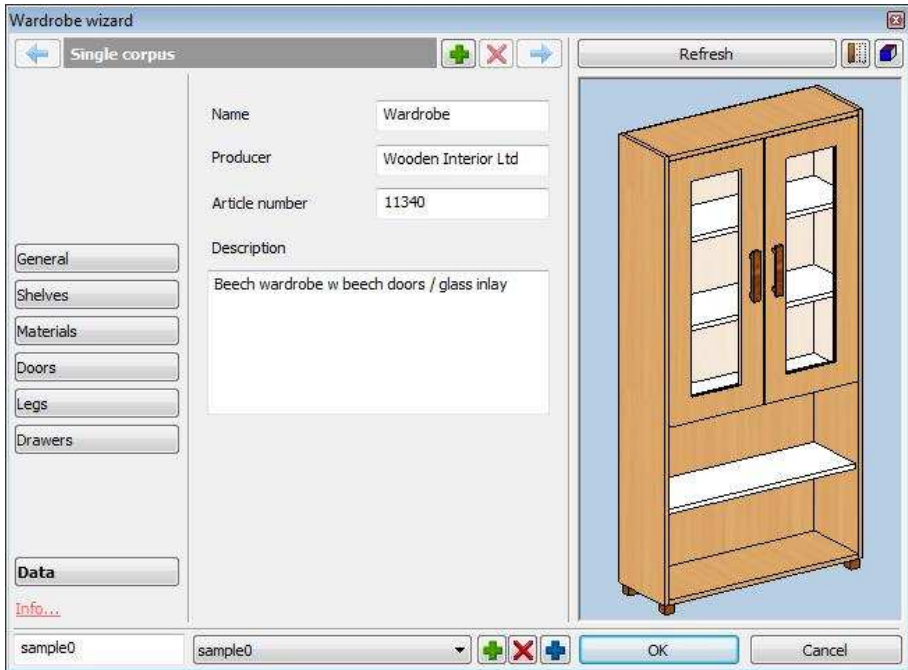
This option enables / disables handle on the frontal panel.

2.1.7.15. Vertical divider

This option enables a vertical divider in the middle of the shelf with the shelf material on it.

2.1.8. Data page

Click on the Data button in the Wardrobe wizard to type additional data for the wardrobe.



2.1.8.1. Name field

Type the name of the wardrobe.

2.1.8.2. Producer field

Type the name of the manufacturer of the wardrobe.

2.1.8.3. Article number field

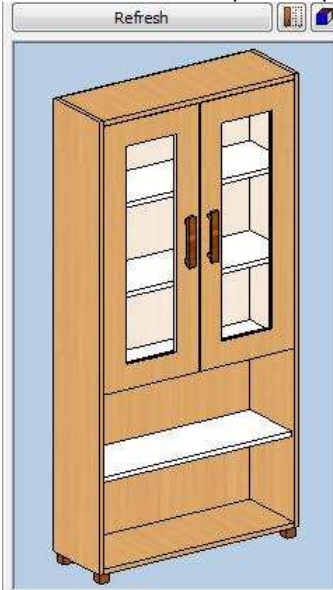
Type the article number of the wardrobe.

2.1.8.4. Description field

Type or paste the additional description of the designed furniture.

2.2. Preview panel

The wardrobe wizard preview panel can be found at the right side of the dialog.

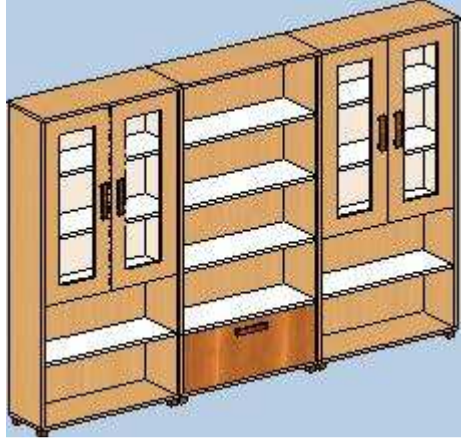
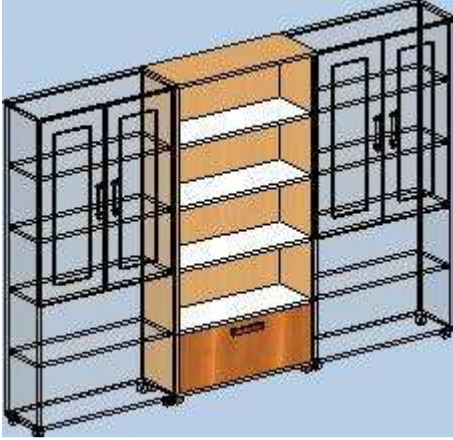


2.2.1. Refresh

Click on the refresh button to visualize any changes of the settings.

2.2.2. Actual corpus / All corpuses

Click on the button to visualize only the actual corpus, or all corpuses of the wardrobe.



2.2.3. Presentation

Click on the Presentation button to change presentation to:

- ❖ No Preview
- ❖ Wireframe
- ❖ Hidden line
- ❖ Textured

2.3. Wardrobe configuration

When you place a wardrobe on the drawing it will be automatically saved into the object library (read later). You also have the possibility to save the setting into a configuration file which will be stored with the object and makes it possible to edit it using the wizard again.



2.3.1.1. Name field

You can type the name of the wardrobe here. The wardrobe will be saved with this name as an object into the object library during placement and this can be the configuration name also. These configurations work like the so called sets at other elements, like walls, slabs etc.

2.3.1.2. Configuration list

This list offers all local and global configurations saved previously.

2.3.1.3. Save as local

Click on “*Save as local*” button, to save configuration as local. Local configurations are available and stored in the actual project file only. Therefore in a new project the local configurations will be unavailable.

2.3.1.4. Delete configuration file

Click on “*Delete configuration file*” button to delete the selected configuration.

2.3.1.5. Save as global

Click on “*Save as global*” button, to save configuration as global. Global configurations are available and stored outside the actual project. Therefore global configurations will be available in every project until not deleted.

2.3.2. Edit wardrobe

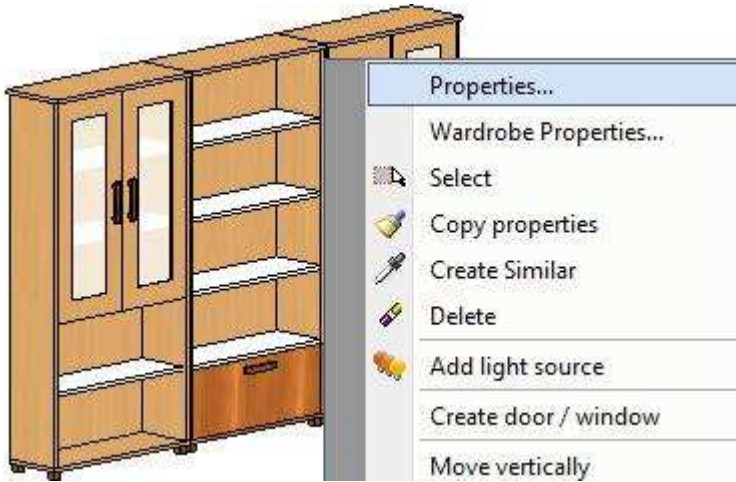
When you place a wardrobe designed in the wardrobe wizard, it will be automatically saved as an object. Later you can find it in the Design Center.



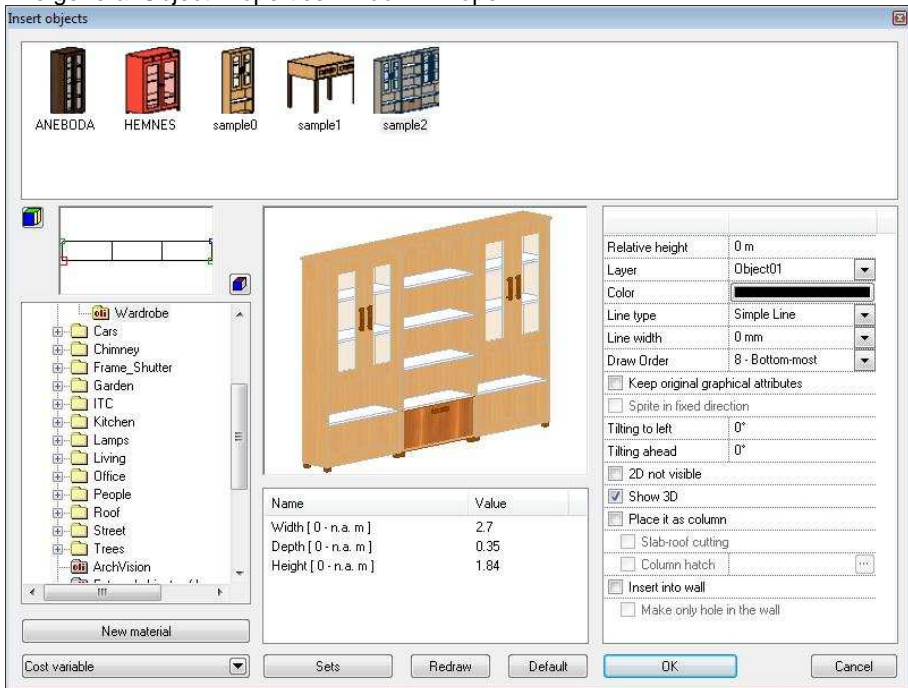
You can handle a wardrobe created by the wardrobe wizard in two ways. One is to handle it as a general object. In that case you can access its main properties.

2.3.2.1. Edit as general object

Choose Properties... in the pop menu of the object on 2D or in 3D.

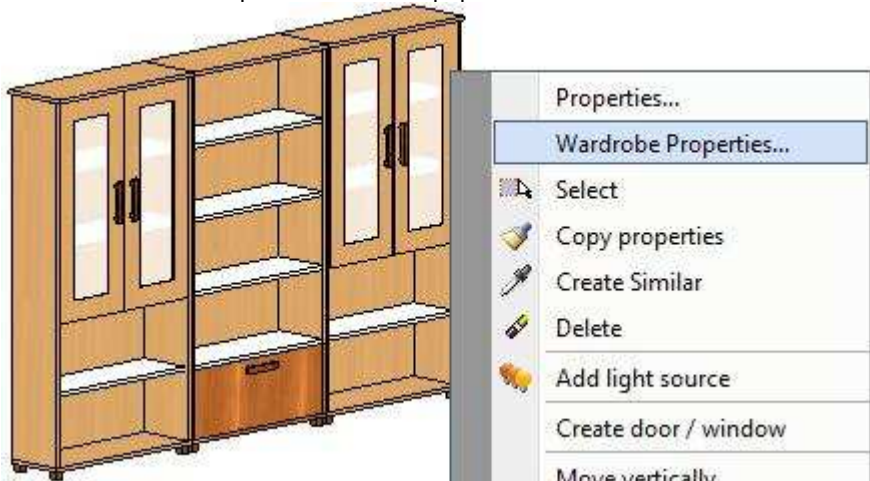


The general Object Properties window will open.



2.3.2.2. Edit as wardrobe

Choose Wardrobe Properties... from the pop menu.

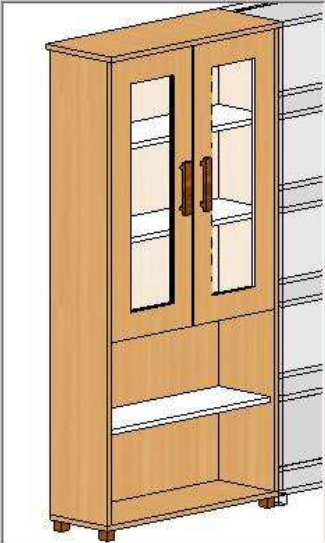


The Wardrobe wizard will open with the settings of the selected wardrobe. You can overwrite the previous settings or create a new version of the already existing element.

Wardrobe wizard

Corpus 1 / 3

Refresh



General

Shelves

Materials

Doors

Legs

Drawers

Data

Info...

sample2

Width	0.9 m
Depth	0.3 m
Height	1.8 m
Thickness	0.02 m
Backside Thickness	0.005 m
Top X extension	0 m
Top Y extension	0.02 m
Sides	Both sides
<input checked="" type="checkbox"/> Has backface	
<input checked="" type="checkbox"/> Has topface	Outer side
<input checked="" type="checkbox"/> Has bottomface	Outer side
<input type="checkbox"/> Include leg height into overall height	

OK Cancel

3. Furniture from Manufacturers

Furniture from Manufacturers tool in ARCHLine.XP is a continuously expanding object database.

With the help of this tool you can access global sanitary, heating and air conditioner manufacturer companies' product databases and use them free of charge in your design.

The actual product database is free to access and download from the following webpage: <http://www.shk-branchenportal.de/>. After registration you should choose Download Center and Badplandaten in the menu of the homepage.



The screenshot shows the website interface for shk-branchenportal.de. The navigation menu includes Home, Über uns, Wer bietet was, FAQ, Presse, Kontakt, and CD-Service. The main content area displays the path Home > Download Center > Badplandaten. The title is 'Badplandaten der Markenhersteller'. Below the title, there is a sorting option 'Liste nach Datum sortieren'. A grid of letters A-Z is visible. Two manufacturer entries are shown:

Alape	Badplandaten Alape bereitgestellt am: 17.12.2009 Bestandsnummer: 4
ARDINO	Badplandaten ARDINO bereitgestellt am: 16.12.2009 Bestandsnummer: 16

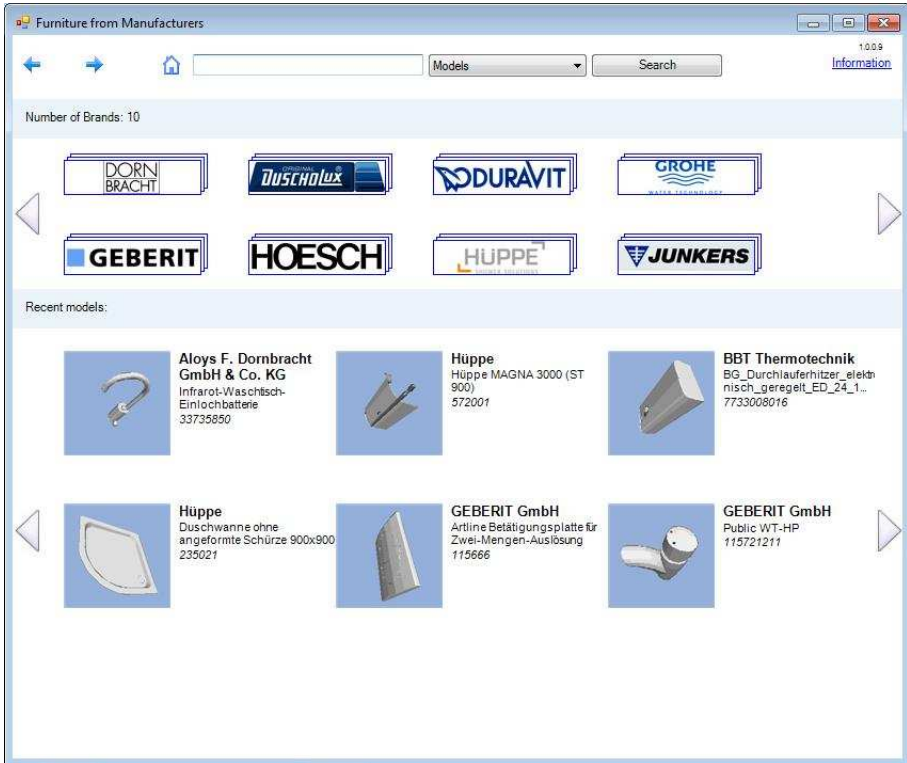
The left sidebar contains a menu with the following items: News, Produkte, Ersatzteile, Badplanung, Download Center (with sub-items: Artikelstammdaten, Ausschreibungsdaten, **Badplandaten**, Bilddaten, CAD-Daten, VDI 3805), VDI 3805, Service, and Meine Daten. The 'Badplandaten' item is circled in red.

Please choose the database you would like to download, by clicking on the manufacturer's name at the right side and install it after download. After installation the built in Object browser in ARCHLine.XP will automatically contain the installed database logo. Select it and choose the desired element from the catalogue.

The selected object can be easily insert to your design and parallel it will be saved into the object libraries of ARCHLine.XP.
The object will contain the name and production code of the product, making it really useful when you create lists of used products later on.

3.1. Object browser

Open **Toolbox –Furnishing – Furniture from Manufacturers** to start Object browser.



3.1.1. First start

The first start of Object browser could take longer, because the software needs to prepare the downloaded new databases for use. If there are no new databases to prepare, Object browser will appear immediately.

3.1.2. Main page

The first or main page of Object browser is the starting point for every search.

3.1.2.1. Navigation pane

The Navigation pane is located at the top of the Object browser.



1.0.0.8
Information

3.1.2.2. Previous page – Next page

Use the left and right arrows in the navigation pane to load previous and next page.



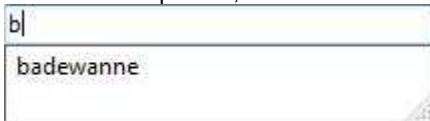
3.1.2.3. Home

The Home icon will navigate back to the Main page no matter where you stay actually in Object Browser.



3.1.2.4. Search field

Type a phrase into the search field and search for it. Search field is able to memorize previous search phrases. Next time you want to use the same or similar search phrase, the software will offer auto complete to help you.



3.1.2.5. Filter by model or by database



Set filter to Models to search in model descriptions, collection names and article numbers. The result will be a list of objects.

Set filter to Collections to search in Collection names only. The result will be a list of collections. You can select a collection in the result list to open its content and access models inside.

3.1.2.6. Information link

Click on Information to open the online description page of Object Browser. This link will navigate you to the ARCHLine.XP webpage and needs internet connection.

[Information](#)

3.1.3. Brand pane

All installed brand databases can be found here represented by their logos. Use the arrows at the left and right side to roll the list. Select one brand logo to open the database and browse its content.

Number of Brands: 10



3.1.4. Recent models pane

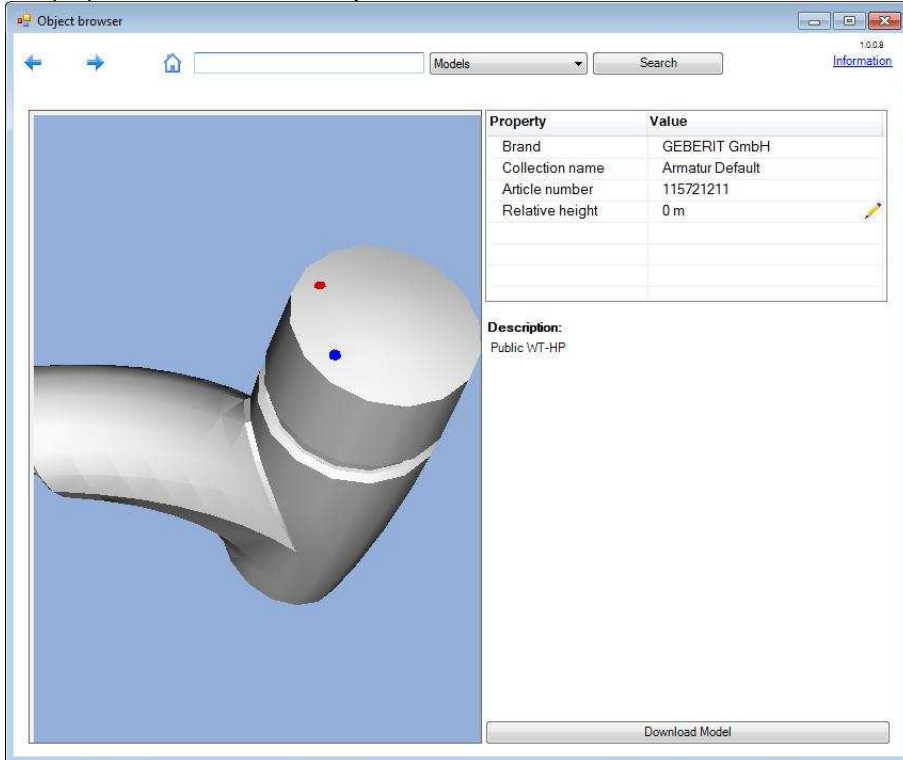
When you place an object on the drawing the last used element will be stored in this list. There is no need to search a previously used object again, because from here you can select and place it again.

Recent models:



3.2. Browsing objects

Select an object by left click in the catalogue to open it. You will see the model and properties of the selected object.



3.2.1. 3D View

3D view helps you check the model of selected product before using it. Hold down the left mouse button over the model and move the mouse to rotate. Hold down CTRL + Mouse scroll and move the mouse to zoom in an out.

3.2.2. Properties

Right to the 3D View there are the properties of the selected object. You can find brand name, collection name, article number and relative height here. You can change the relative height to set the position of the object in the 3D space.

3.2.2.1. Description

If the selected product has a description, you can see it in the description field.

3.2.2.2. Download model

Click on Download model to place the selected product on your drawing. At the same time it will be automatically saved into an object library under **Objects / Brands**.



The object will automatically contain the name, description and article number of the product. This will be handy when you will create the lists of the objects and items in your project, using ARCHLine.XP listing tools.

No	Name	Volume	Code	Description	Pc	Price	Total
1	 Hüppe MAGNA 3000 (ST 900)	0.90x0.96x2.45	572001	Duschabtrennung Default	1	54	54
2	 BG_Durchlauferhitzer_elektronisch_geregelt-f65 3bc5	0.24x0.14x0.47	7733008016	Warmwassergefäß Default	1	430	430
3	 Duschwanne ohne angeformte Schürze 900x900	0.90x0.90x0.08	235021	Duschwanne Für Eck	1	120	120
4	 Artline Betätigungsplatte für Zwei-Menüen-4573127	0.21x0.02x0.14	115666	Accessoire Default	1	32	32

3.3. Good to know

When you start your search by clicking on the Search button the time of search will depend on the number of installed brands. Please wait until the search results are displayed.

When you use the navigation arrows on the Navigation pane of Object browser the previous search will be applied. This means if the previous search took long time to display, you should wait again to be able to access the results.

The whole search phrase must be at least 3 characters long.

4. Roman blind wizard

The roman blind wizard is a great tool to create roman blinds just by setting up some simple parameters.

To create a roman blind do the following:

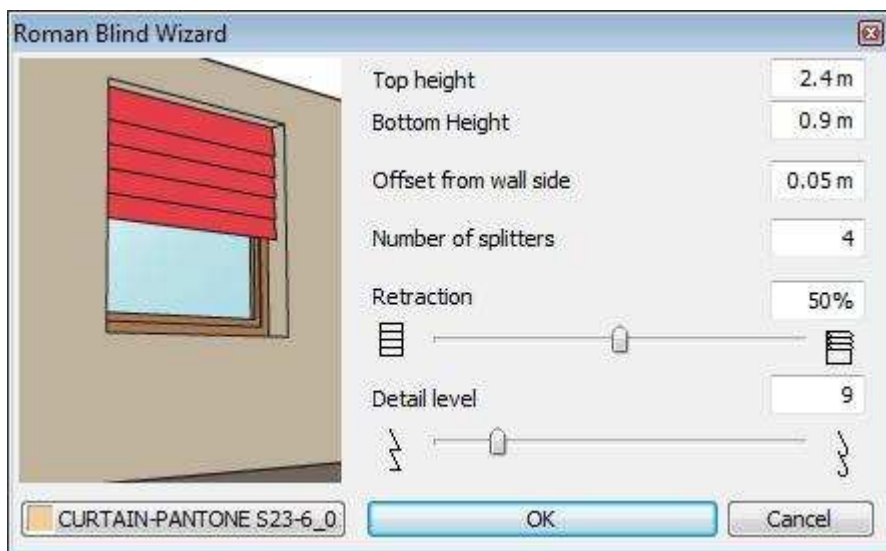
Start the command and select an opening.

The software will recognize the size of the opening and the roman blind wizard will appear.

Set the properties and click on OK to create the roman blind.

If the roman blind will be at a different position please use the properties in the roman blind wizard to set the proper values.

4.1. Roman blind wizard parameters



4.1.1. Top height

Here you can set the top height of the roman blind, measured relatively from the base level of the active floor.

4.1.2. Bottom height

This value sets the bottom of the roman blind when it is fully released.

4.1.3. Offset from wall side

The distance of the roman blind measured from the wall plane can be set here.

4.1.4. Number of splitters

The number of horizontal divisions can be set here.

4.1.5. Retraction

The lowest value means a fully shut roman blind, and the top value means a fully opened roman blind.



Shut:
0%

Semi-opened:
50%

Opened:
100%

4.1.6. Detail level

You can set the detail level of the surface of the generated roman blind. Higher value makes the final result more realistic while lower will make it rough.

4.1.7. Material

Click on the Material button to open Material browser where you can select a material for the roman blind.

4.2. Change an existing roman blind

The result of the roman blind tool will be a freeform surface. However while it was created by using the roman blind wizard the settings made in the wizard can be changed any time, using the same interface. For this right click on the existing roman blind and select Roman blind properties... in the appearing pop menu.



In the appearing roman blind wizard change the settings as you wish and push OK button to regenerate the existing roman blind with the new settings.

5. Object by photo

Using the Object by photo tool you will be able to use parts of photos in your design as surfaces of real 3D objects.

5.1. How to create an object by photo?

The idea of making an object by photo consist 4 steps.

1. Load photo
2. Define orthogonal surface
3. Save orthogonal image as material
4. Define an object with the material on its surface



How to snap a surface:

1. Load the photo of the furniture

- Set 4 corners of one orthogonal surface on the photo. Accept definition and the surface will appear as an orthogonal image.



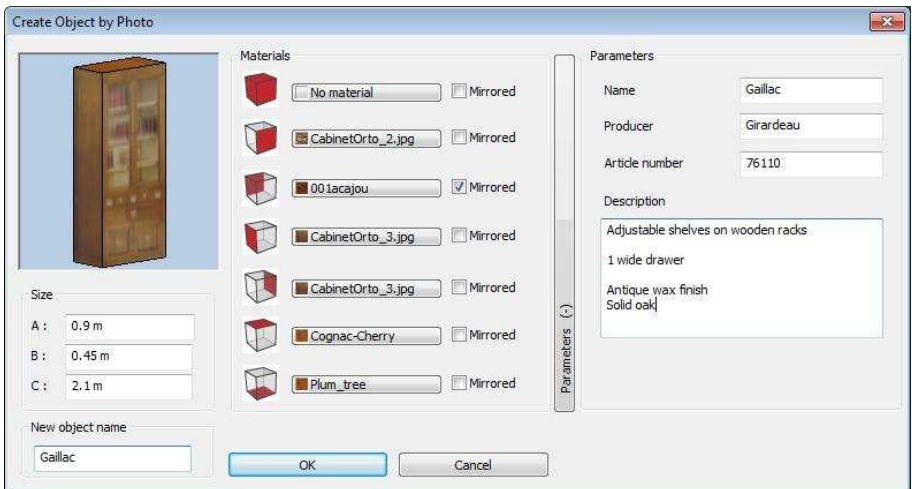
- Repeat previous steps to snap more surfaces.

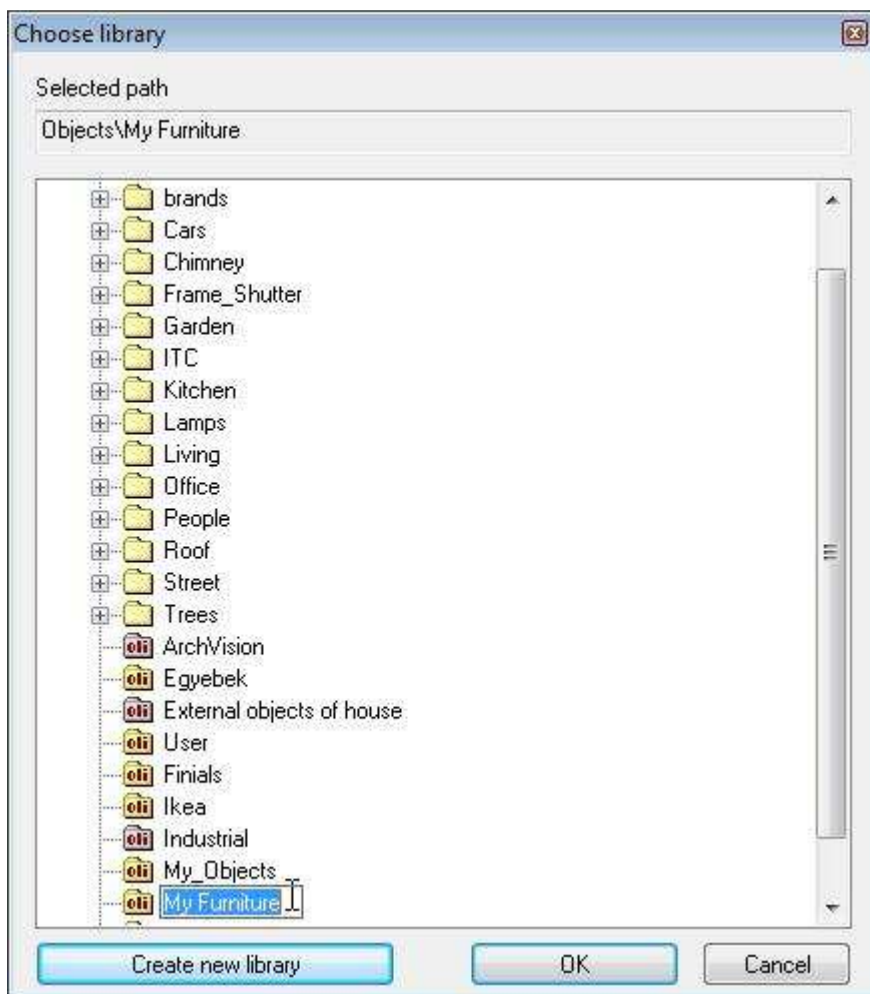


- Save orthogonal images as materials using Save as material command in the image pop menu.



5. Create a new furniture using Object by photo tool.

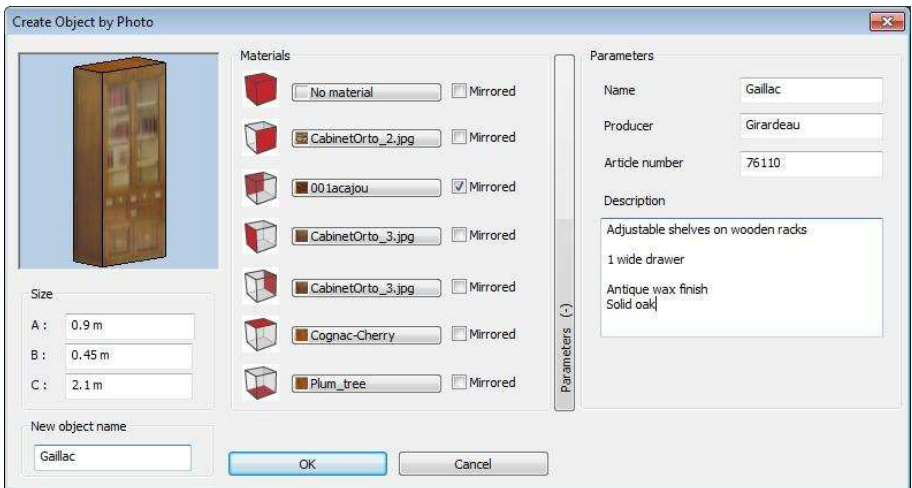




You can enhance the realism of the final render of one simple object when you use the Bump mapping properties of the materials applied on its surfaces.



5.2. Create object by Photo dialog



5.2.1. Preview

Here you can see the preview of the actual settings. The preview makes it easy to control the changes you make during the design process.

5.2.2. Size

Set the A, B, C size for the object. Type the size into the field, and when you click into another field you will see the change in the preview window.

5.2.3. New object name

Type the name of the object. This name will be applied when you save the finished object into a library.

5.2.4. Materials

You can set materials to each sides of the object here. Click on the material button and select one in the appearing material browser.

5.2.5. Mirrored

Use this option to flip the selected material horizontally.

5.2.6. Parameters

Click on Parameters button to expand the parameters panel. Here you can type additional data of the object you design.

5.2.7. Name

Enter the name of the object here.

5.2.8. Producer

Enter the name of the manufacturer of the object here.

5.2.9. Article number

Enter the article number here.

5.2.10. Description

Enter a description of the object. The description can be a longer multiline text.

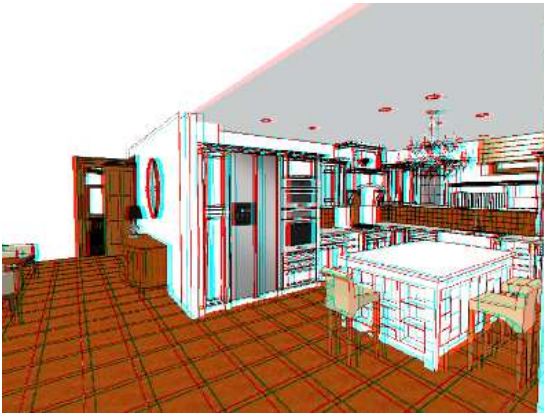
6. 3DTV module

With ARCHLine.XP new 3DTV module, customers feel the 3D space as walking around. You can walk in the 3D model feel like you could touch any part of it, because depth and distance becomes realistic as never before! If you create an animation walkthrough you can provide it as a recorded video to your customer

The 3DTV module is based on anaglyph colour filter technology.

Healthy eyesight is necessary to enjoy stereo anaglyph visuals.

To use 3DTV module you will also need to download and install i3DDriver from our [webpage](#).



6.1. Start/Stop 3DTV

Click on Start/Stop to start or stop the 3D anaglyph visual mode. Please wait a while until the colour coded picture is generated. Put on your red/cyan anaglyph 3D glasses and use Walk and Fly tool or create an animation to enjoy or record the visuals.

6.2. Configure 3DTV

Anaglyph 3D visuals might need configuration time-by-time for the customers. You can start this configuration anytime by Properties command in 3DTV tools. Follow on-screen instructions.

7. Layer management developments

7.1. Layer toolbar

Layer tools are collected on a new Layer toolbar, separated from the Status toolbar.



Layer toolbar contains two new buttons also:



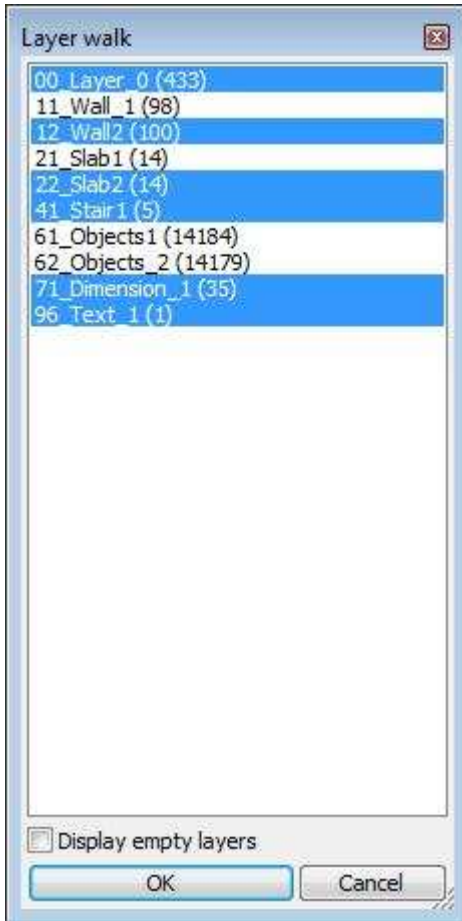
Layer control mode



Layer Walk tool

7.2. Layer Walk tool

Layer walk tool helps you navigating through your existing layers of one drawing. The key point of using Layer walk is that it makes easy to switch on and off visibility of layers and visualize the effect at the same time on the drawing itself. The layer walk list shows the names of layers and the numbers of elements of one layer between bracelets “()”.



Layer Walk tool can be found on Layer toolbar and also in the main menu in Modify / Layer walk.


7.2.1. Display empty layers

This option enables the visibility of empty layers in the layer walk list. By default all empty layers are invisible.

7.3. Using layer walk

7.3.1. Select a layer

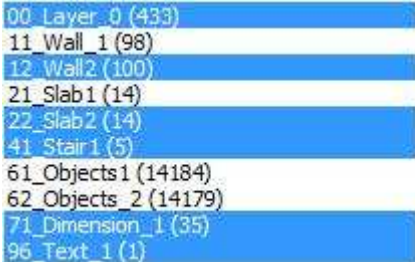
When the layer walk list is opened you can select a layer, by clicking on its name. The selected layer will be highlighted and its content will be automatically visible in the active window.



00_Layer_0 (433)
11_Wall_1 (98)
12_Wall2 (100)
21_Slab1 (14)
22_Slab2 (14)
41_Stair1 (5)
61_Objects1 (14184)
62_Objects_2 (14179)
71_Dimension_1 (35)
96_Text_1 (1)

7.3.2. Select multiple layers

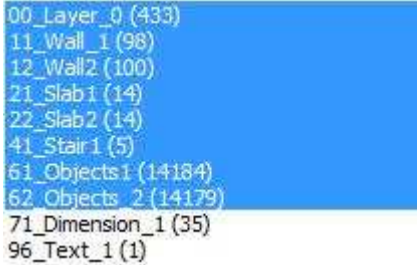
To add a layer to your selection please hold down Ctrl button and click on the layer name. The selected layers will be highlighted and their content will be visible in the active window.



00_Layer_0 (433)
11_Wall_1 (98)
12_Wall2 (100)
21_Slab1 (14)
22_Slab2 (14)
41_Stair1 (5)
61_Objects1 (14184)
62_Objects_2 (14179)
71_Dimension_1 (35)
96_Text_1 (1)

7.3.3. Select layers between first and last selection

You can select every layer in the layer walk list between two selected list elements. Click on the first one, hold down the SHIFT button on your keyboard and click on the last element. Every layer between the selected ones will be selected, including the first and last.



```
00_Layer_0 (433)
11_Wall_1 (98)
12_Wall2 (100)
21_Slab1 (14)
22_Slab2 (14)
41_Stair1 (5)
61_Objects1 (14184)
62_Objects_2 (14179)
71_Dimension_1 (35)
96_Text_1 (1)
```

The same selection is also available by mouse only. Move over the first element, and hold down the left mouse button. While holding the left button move the mouse towards the end of the list and when you are satisfied with the selection release the mouse button. All elements will be selected between the first selection until the list element where the left mouse button was released.

8. Insert 3D model into photographic background

The *Add-On menu – Insert 3D Model in photographic background* functions of ARCHLine.XP® enables you to survey the perspective of the photograph that shows the environment; you do this with the help of a block whose enclosing parameters you define. This perspective will be applied on the model, too.

ARCH Line XP now contains a new Estimation method for inserting the 3D model into a photo. The new method is faster and easier to understand.

The old method which is based on known distances is described in chapter 15.4 of the User's Manual.

8.1. How to use the new Estimation method

8.1.1. Import the background image

1. Activate the 3D window.
2. Select **Add-on/Insert 3D model in photographic background / Import Raster Image**. Select the photo in which you want to insert the model and then place it into the 3D window by giving its bottom-left and top-right corner.



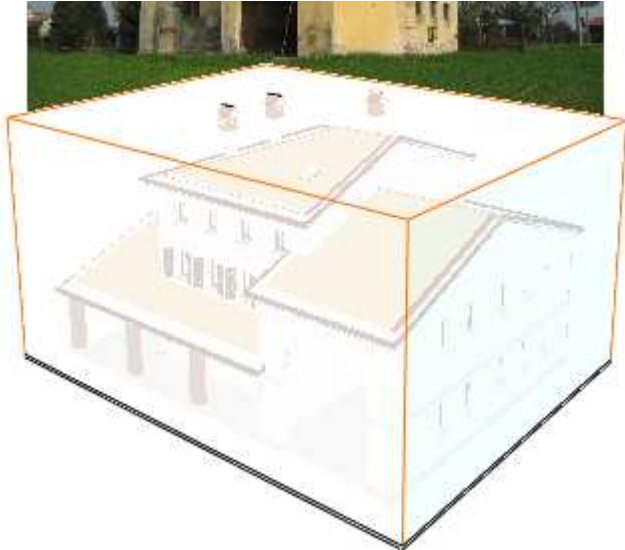
3. Double click on the photo and modify its properties: make it semi-transparent and modify the display order: bring the image on the top.

File		General Properties	
Name	photo.jpg <input type="button" value="Browse"/>	1 - Top-most	08_Háttérkép
Path	C:\Documents and Settings\All Users\Application Data\CadLine		
	No path (embedded)		
Insertion Point		Rotation	
<input type="checkbox"/> Specify on screen	<input type="checkbox"/> Specify on-screen	<input type="checkbox"/> Specify on-screen	
X:	10.06 m	Length	27.98 m
Y:	-2.8 m	Height	20.99 m
Preview		Transparency	
		Resolution: 2816 x 2112	
		110	
Cost variable <input type="button" value="v"/>		<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

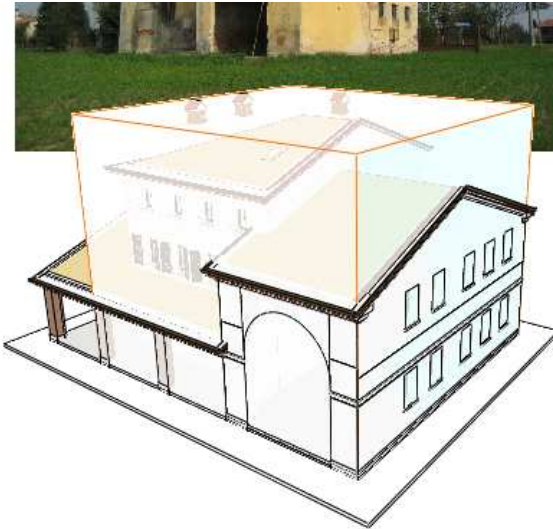
8.1.2. Define the bounding box

Select **Add-on/Insert 3D model in photographic background / Method I. – Estimation / Start** and define the bounding box:

1. First click on a facade of the building, a surface that is properly visible on the photo as well. The bounding box of the model appears.



2. Align the sides of the bounding box to the most-significant surfaces of the building by clicking on faces of the box one after the other. To reach the back faces you can rotate the model during this operation.



3. Finally, rotate the model into the view which is similar to the view of the photo and press ENTER.



8.1.3. Aligning perspective

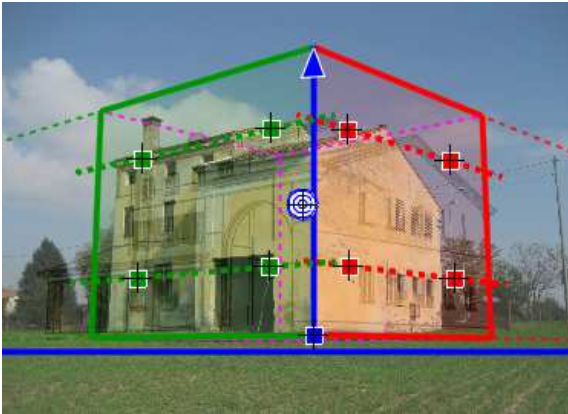
1. Move the view point () into the centre of the photo.



2. Move the thick horizontal line in blue into an approximately correct position.



3. Move the corner of the bounding box marked by the  sign to the related point on the photo, and then enlarge the model to a roughly correct size by using the  marker.




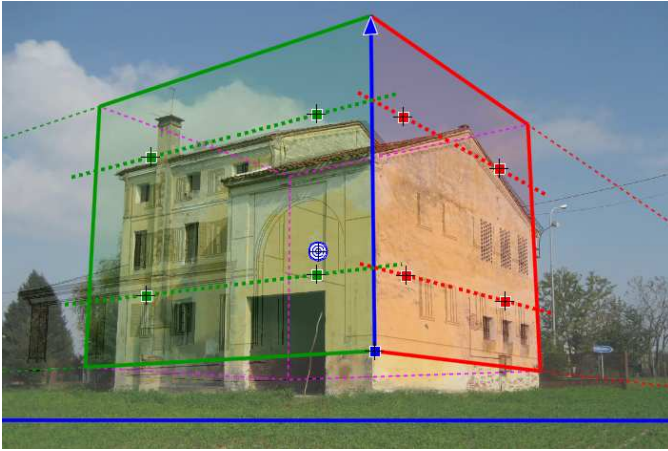
4. Find two edges which are properly visible on the photo and are parallel to the top and bottom edges of the red plane of the bounding box. Align the red dotted lines to these edges.



5. Repeat this with the green dotted lines.

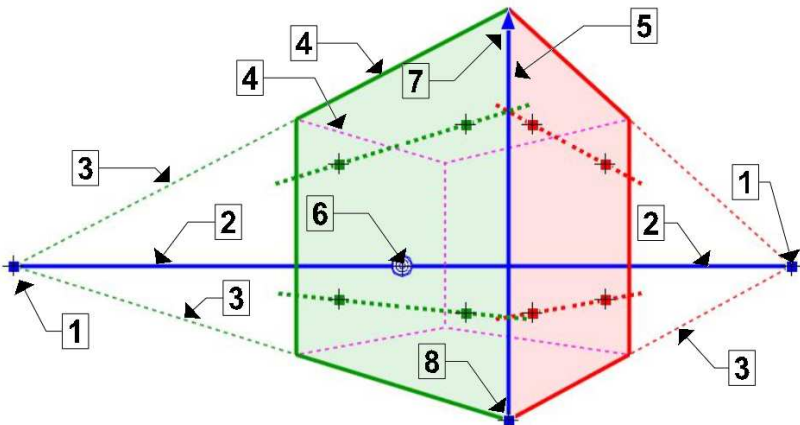


6. Enlarge the model to the correct size by using the  marker.





8.1.4. Fine Tuning

If the model does not fit the photo precisely, you can refine the alignment in several ways. Click on a point or edge marked by a number on the figure below.

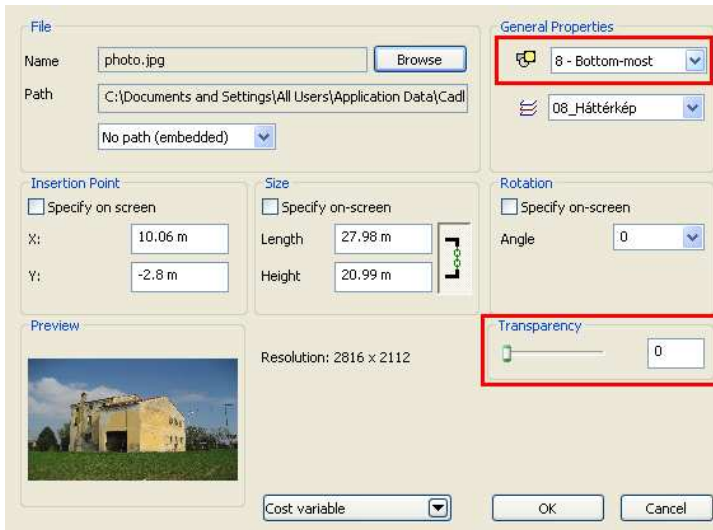


1. Moves the vanishing point.
2. Moves the horizon line (up and down) and moves the nearer vanishing point (left and right)
3. Moves the related vanishing point

4. Replaces the red and green faces of the bounding box, the clicked edge will be the common edge (in blue) of the two faces.
5. Replaces the  and  points to each other.
6. Moves the view point
7. Resizes the model
8. Moves the model

8.1.5. Final steps

1. Double click on the photo and modify its properties: make it non-transparent and modify the display order: put the image on the bottom.





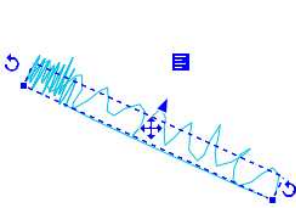
8.1.6. Rendering

1. Select the **Add-on/Insert 3D model in photographic background / Render** and set the Rendering Properties
2. Press then Start Rendering button and define the name of the rendered image file. The renderer saves two files, the normal rendered image with the given name like “model_to_photo.jpg” and the single background image with an extended filename “model_to_photo_back.jpg”.
3. The ARCH Line Image application appears and opens these two files. You can compose the final image using this application. See chapter 15.4.4.in Users Manual

9. Improvements

9.1. Curtain Wizard and Table Cloth Wizard markers

Freeform Surface elements which have been created by a wizard (Curtain, Table Cover and Roman Blind) now have their own markers in the 2D window. By means of them you can modify these elements on the floor plan.



Curtain

You can move the endpoints of the bounding box or change its width.

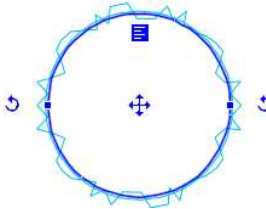
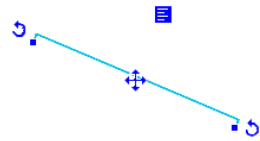


Table cloth

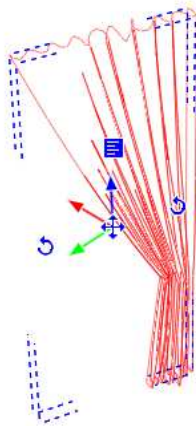
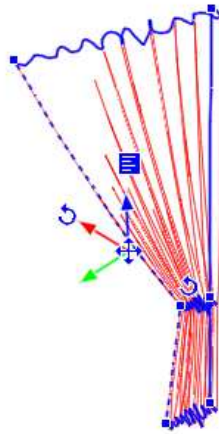
You can modify the table profile using the markers. *(The modified profile can not exceed the profile of the cloth.)*



Roman blind

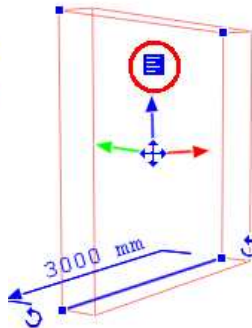
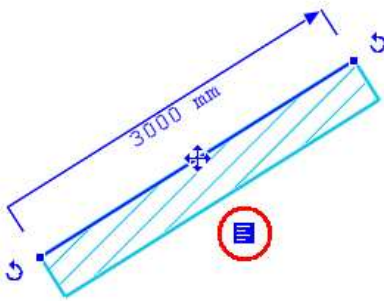
You can move the endpoints of the roman blind.

You can edit these elements as general freeform surfaces, too. To show markers of the freeform surfaces just right-click on the element and select **Edit As Freeform Surface** from the appearing menu. You can also access these markers by selecting the element with **ALT+left click**.

**Curtain markers****Freeform surface markers**

9.2. Properties marker

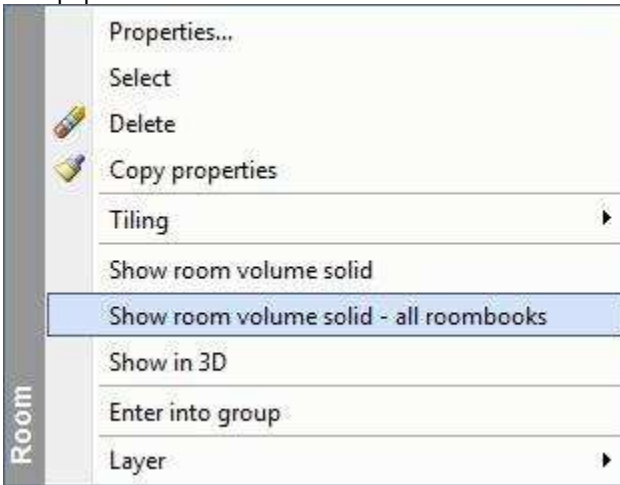
If you select an element, in addition to the common markers like Move, Rotate etc. a new Properties marker appears. By clicking on it you can access the Properties Dialog of the element. The effect of clicking on this marker is equivalent to double clicking on the element or selecting the Properties command from its Popup menu.



If you are an experienced user and you do not want to use this marker, you can switch it off by selecting **Preferences/General /Marker settings** from **File menu** and clear **Enable Properties Marker** checkbox.

9.3. Room book

New pop menu command: Show room volume solid – all room books.



9.4. 3D Objects

Define objects by photo

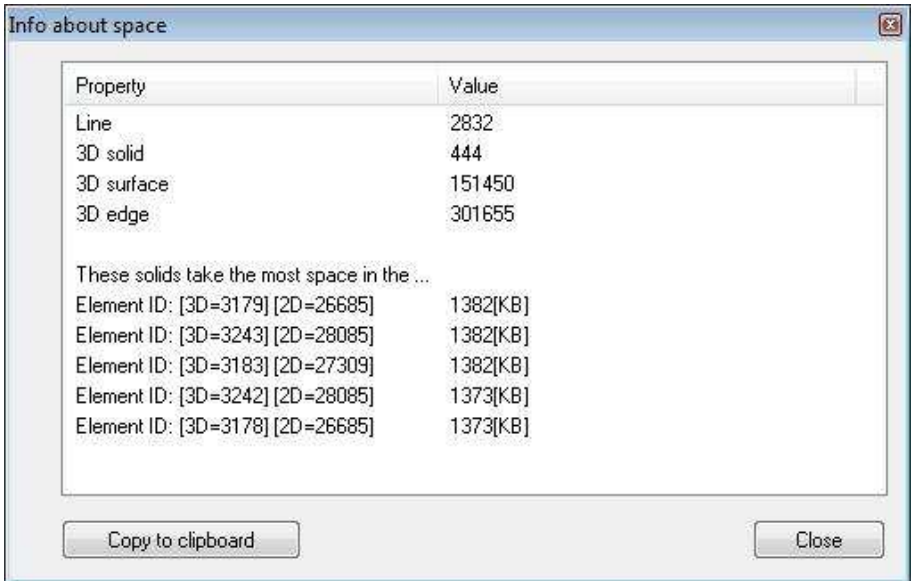
Furnishing menu – Define object by photo tools (description in this document)

Lamps 2 object library update

3D objects in Lamps 2 object library are updated to match new light source handling.

Info about space

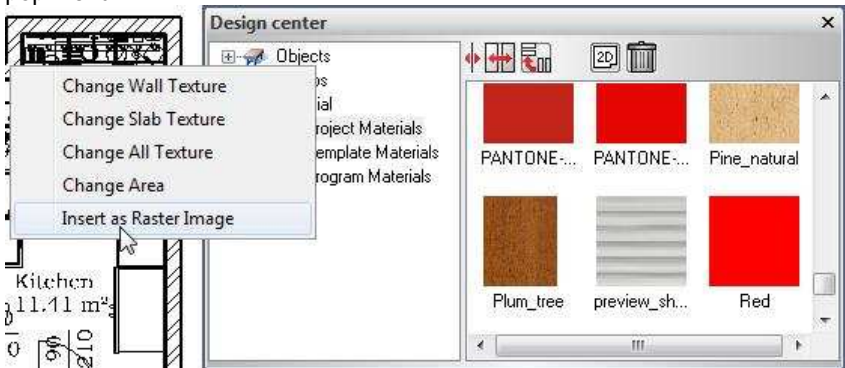
Tools menu - Info – Info about space: The 3D solids taking the most space in the memory are listed when you start the tool in a 3D window.



Furnishing – Roman blind tool (description in this document)

9.5. Design center

Drag and drop materials from Design center to insert them as raster images on 2D and 3D drawings. Select Insert as Raster Image from the appearing pop menu.



9.6. User interface

Command hints

Introducing Command hints (Help menu – Command tips).

Face limit

The default value of face limit is increased to 30.000 in the Build up 3D dialog window.

Command alias

Multi word aliases can also be defined using Tools menu – Customize – Command alias.

9.7. Stair

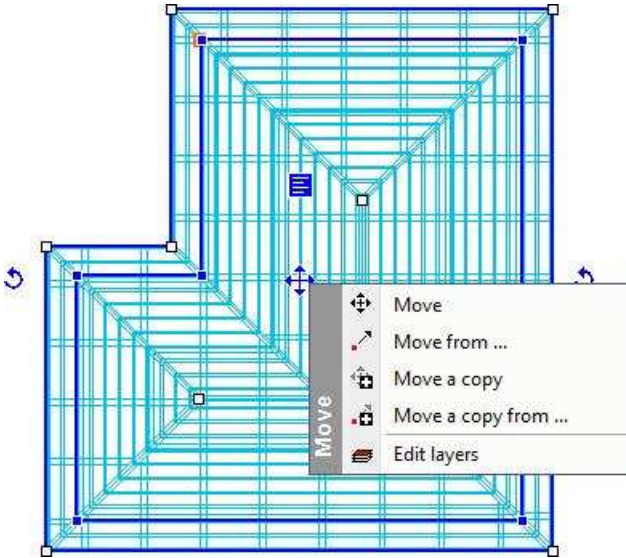
In previous versions, ARCHLine.XP offered the possibility to set reference points of stairs in preview dialogs, which was unnecessary and confusing. Reference points are not shown from now in Stair previews.

9.8. Wall reference line

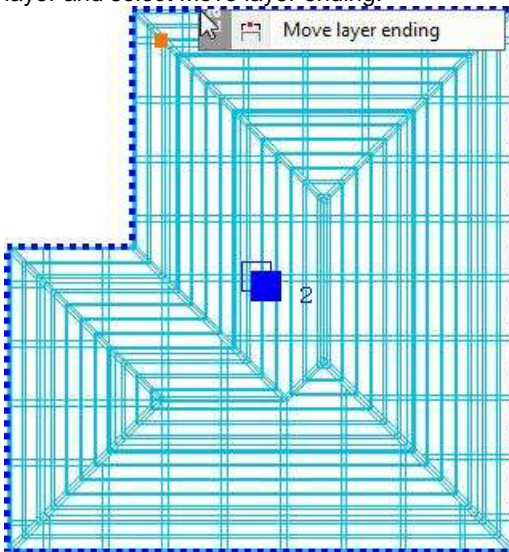
In Wall Properties dialog Wall layer section there is the simplified possibility to set wall reference line by value instead of previous settings for Left, Right and Middle reference line.

9.9. Roof – Edit layers

Roof layers can be edited similarly to editing slab layers. You can access Edit layers tool in Roof pop menu – Edit layers or the Roof Move marker menu – Edit layers.



After selecting the Edit layers tool you can make an offset to all endings of the active layer in one step. Click on the dashed contour marker of the roof active layer and select Move layer ending.



The roof layers setting dialog is extended by new possibilities:

- Roof layer bottom ending distance and type can be set.

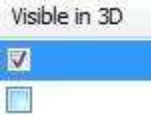
You can set the bottom ending distance by selecting from the dropdown list or you can type a value.

0 m

Follows roof ending

If the roof layer bottom ending distance is not set to “Follows roof ending” then you can select a layer ending type by clicking on the ... button. Select an ending type in the appearing dialog window and click OK to accept it.

- Visibility of the layer can be set for each roof layers one-by-one.



9.10. Roof structure – representation by centerline

Representation of each main structural parts of the roof (rafter, batten, purlins...) can be set one-by-one. To represent each structural part by centreline enable the option on the setting page of the element.



9.11. Slab – Layer visibility

Visibility of a layer can be set for each slab layers one-by-one in the slab layer settings dialog.

No.	Name	Material	Thickness	Visible in 3D
1 <--		Reinforced_concrete	-0.03 m	Visible
				Off

9.12. Light sources – compatibility improvement

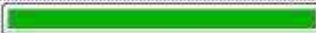
Tools menu – Accessories – Light manager 2009: there is the possibility to switch on/off incompatible light sources that are created with previous versions of the software.

9.13. Light sources – Intensity falloff

Light source settings are extended with the falloff property. The falloff option can be:

- ❖ Constant
- ❖ Inverse to distance
- ❖ IsI

Default setting for the falloff is the Inverse to distance. This will result in the most realistic final render.

⤴ General	
Name	Advertisement green light
Type	Polyline ▼
Category	Neon ▼
Luminous flux	1200 lm ▼
Colour	
Fall-off	Inverse to distance ▼
	Constant
	Inverse to distance
	IsI

9.14. Light sources - Selection

You can select a light source by clicking on its solid, when it is visible in a 3D window. At other situations when the light source solid is not visible, you can select light sources by using the light source markers, previously introduced in ARCHLine.XP R1.

9.15. Export / Import – Sketchup materials, lights and Artlantis export enhancements

After importing SketchUp files, stretched textures will be appearing well, thanks to developments that make ARCHLine.XP able to handle different texture management.

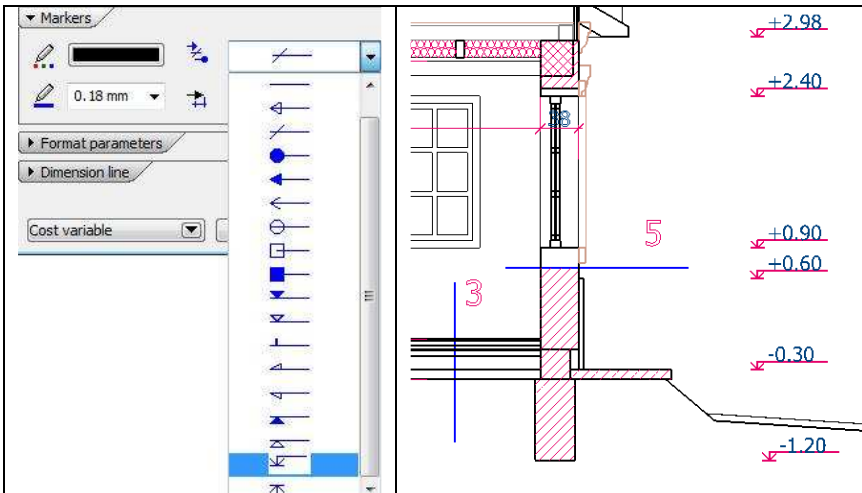
Archive tool in ARCHLine.XP keeps previous states of archive copies up to 5 different latest states a day.

New light source types also can be exported to Artlantis.

Animation quick video generation is accelerated.

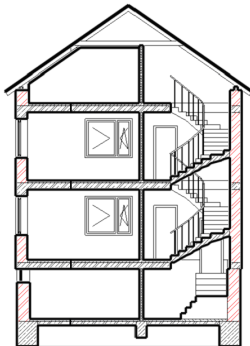
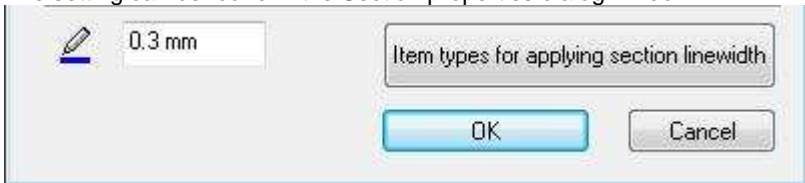
9.16. Dimension – new markers

Marker list for dimensions is extended by two new symbols, useful for elevation dimensions. Using the new markers the projection line of a dimension will be automatically invisible.



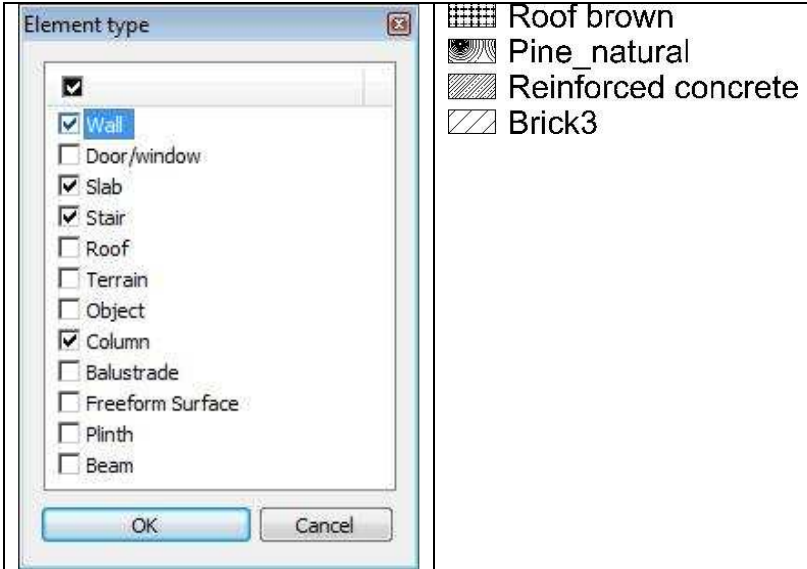
9.17. Section properties – Item types for applying section linewidth

Using the section tool there is the possibility to set different line thickness based on the element type that was intersected by section plane. This possibility gives you the ability to visualize main structural elements and other elements with different conditions. The setting can be found in the Section properties dialog window.



9.18. Legend of materials

Architectural versions – Drafting menu – Legend of materials tool generates a legend of the selected items' materials representing the names and hatches of the materials used on the drawing.



9.19. Text find and replace

Using this new tool you can find and replace texts. Special characters can also be used to extend search. Click on Drafting menu – Text – Find and Replace command.



9.19.1. Search field

Type the text into the search field.

9.19.2. Replace field

Type the text you would like to use as replacement of the search result when Replace or Replace all is pressed.

9.19.3. Match case

The search can be set as case sensitive with this option. Otherwise the software won't make difference between uppercase or lowercase characters, during searching.

9.19.4. Search hidden layers

Enable this option if you want to extend the search for hidden layers also.

9.19.5. Find next

Push this button if you want to begin or continue the search for the next possible match.

9.19.6. Replace

Click on Replace to replace the result of search by the text given in the replace field.

9.19.7. Replace all

Click on Replace all to replace all the results of search by the text given in the replace field.

9.20. Mouse handling: Long click mode can be switched off

From ARCHLine.XP R2 there are two ways to use the mouse in the toolbox.

- ❖ **Classic:** Holding down the left mouse button over a menu point of toolbox will make the submenu open after the previously set delay time is over. When you

move the mouse over a command and release the left button, the command will be started.

- ❖ **Normal:** When you switch off the long click mode the single left click will open the submenu of a menu element automatically. Another simple left click is needed to start a command in the submenu. This approach of mouse handling is Windows standard.

