ARCHLine.XP® 2011

News

Release 1

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

Contents

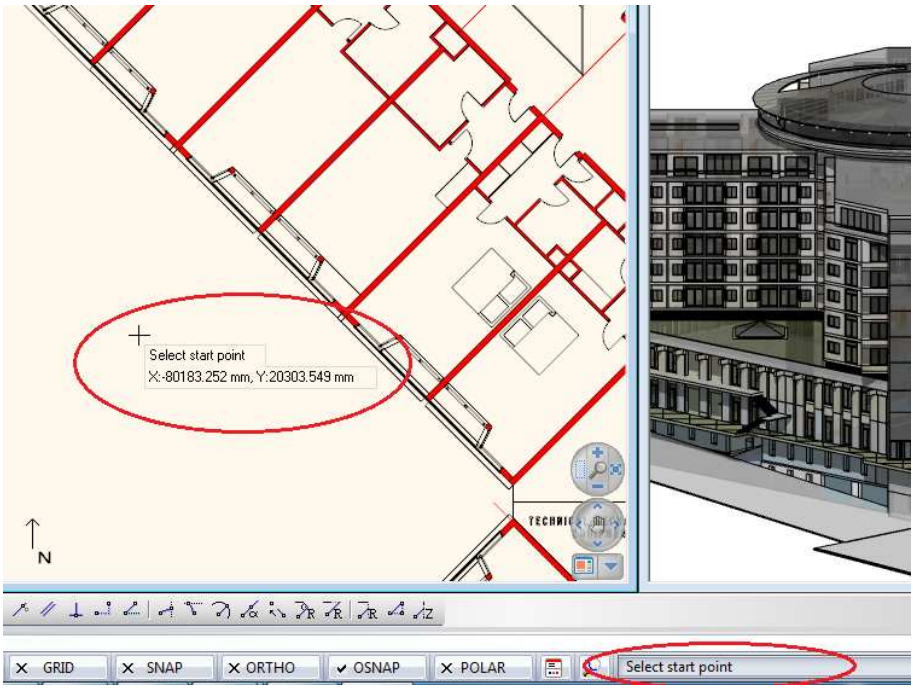
ARCHLine.XP 2011 new features

1. Interface

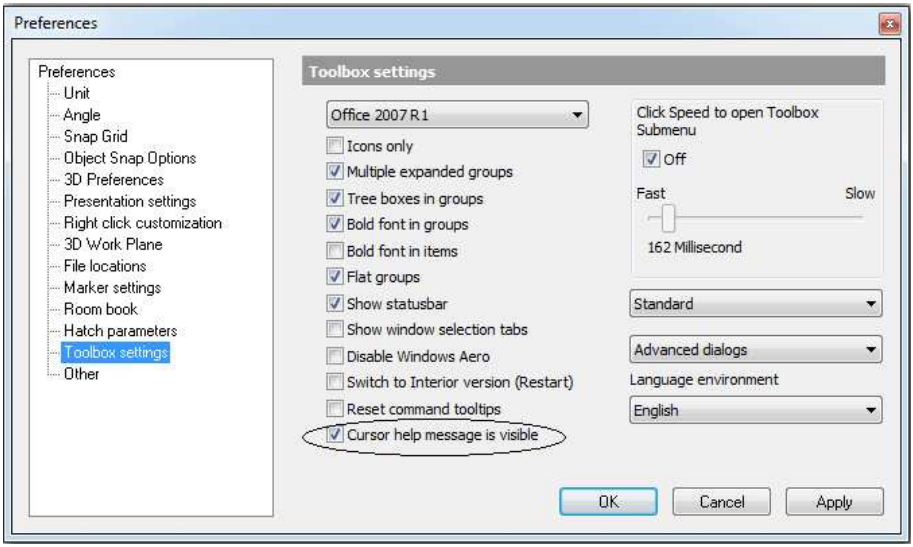
During the development of ARCHLine.XP 2011 the goal was to have an easy-to-use interface & workflow not only for the experienced users but beginners in computer design as well. The new developments expedite daily work, and help to understand the handling of unused tools.

1.1. Cursor help message

When you execute a command, ARCHLine.XP 2011 responds in two ways. First you see the message under you drawing area in the bottom right area helping you to continue the current command (e.g. Line command says: Select start point) and the cursor is changing its appearance and displays the same message. You do not need to have experience in the usage of a tool, because cursor help message will guide you through any commands.

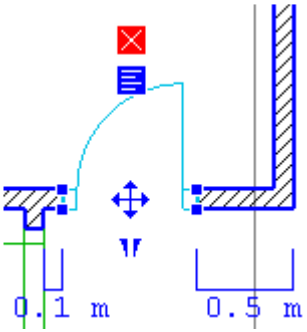


You can switch the cursor help message on or off at the File menu / Preferences/Toolbox Settings panel.



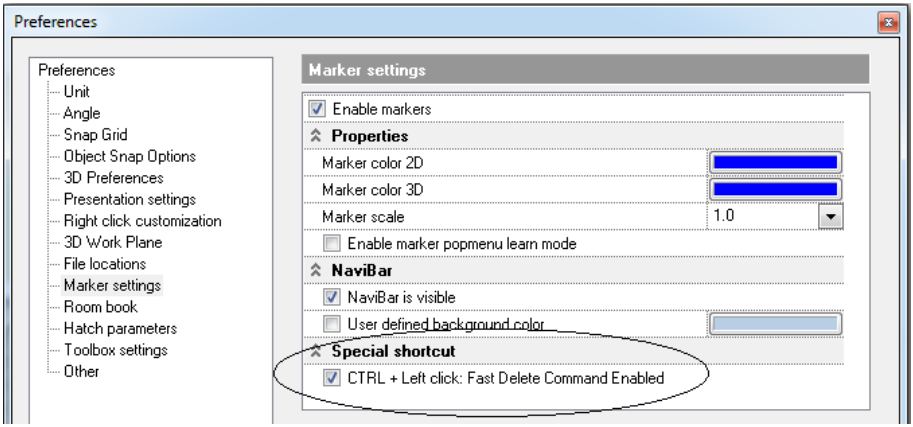
1.2. Delete marker

When you select one or more elements, the Delete marker will appear together with other markers. Click with the left button on the red X marker and the selected items will be deleted.



1.3. Fast delete shortcut

The CTRL + left mouse button click is a special shortcut that executes the Delete command right away. In ARCHLine.XP 2011 this shortcut is switched off by default. When the Fast Delete shortcut is disabled the CTRL + left mouse button click selects and highlight the item.

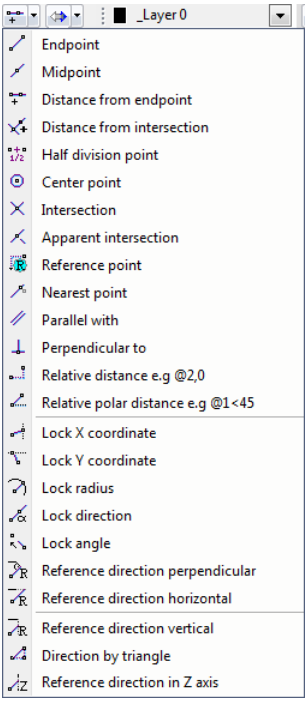


1.4. Reference menu

Parallel to the reference toolbar the same tool is available from the Status toolbar in a more compressed form as a list. It saves space on your screen and you may enlarge the drawing area.

The toolbar form:

The new form in the Status toolbar:

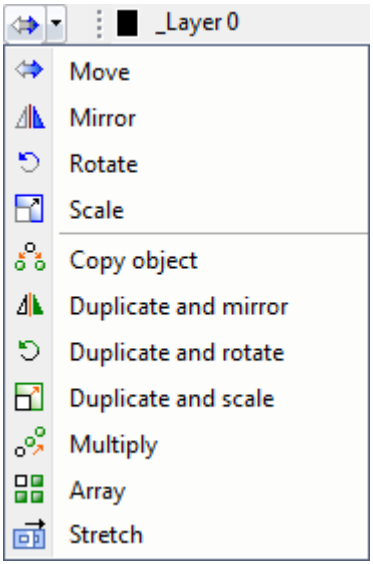


1.5. Move menu

Parallel to the Move toolbar the same tool is available from the Status toolbar in a more compressed form as a list. It saves space on your screen and you may enlarge the drawing area.

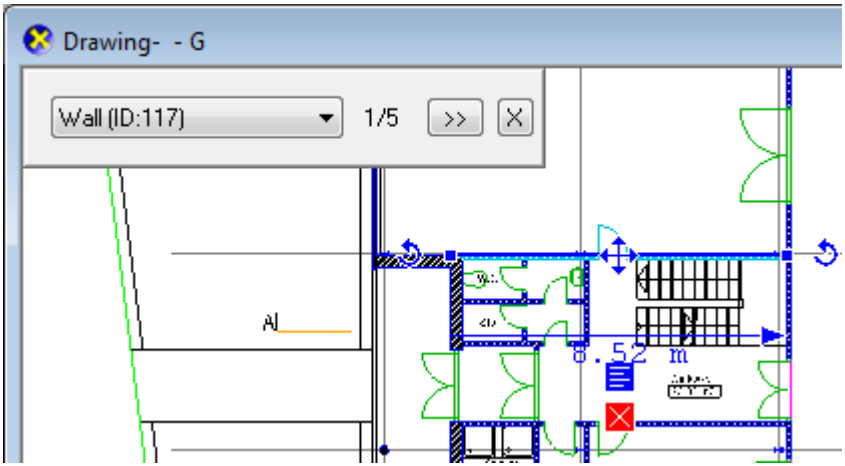
The toolbar form:

The new form in the Status toolbar:



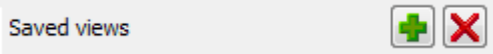
1.6. Automatic quick selection

If there are multiple elements at a certain click point, the quick selection menu pops up helping to choose the proper element.

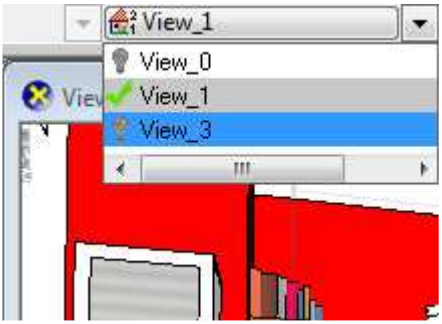


1.7. Saved perspectives menu

The saved perspective views menu helps to switch easily between the stored views in the project.
You can save a new perspective view with a name in the Perspective dialog.

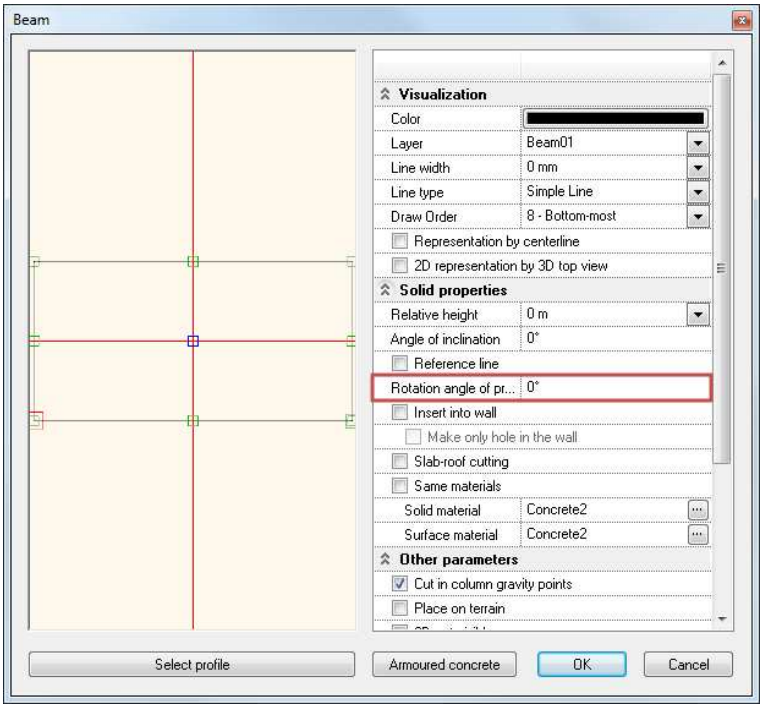


When a 3D window is active and you press the Page up or Page down keys you can step to the next or previous stored view in the list or you can select one from the list directly.



1.8. Rotation angle of profile for beams

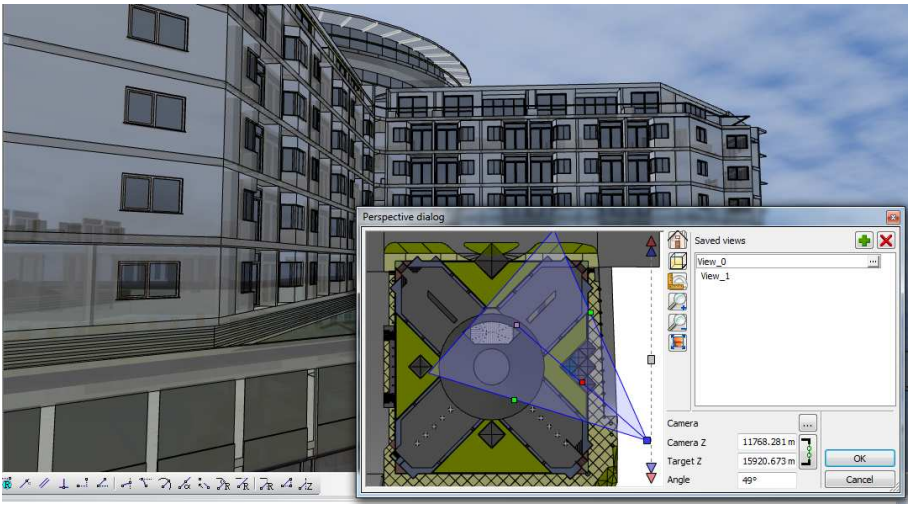
By defining the Rotation angle of profile for beams at the Beam properties dialog, you can rotate the beam cross section to any desired angle. You can type the value into the Rotation angle of profile, or you can choose from the drop-down menu also. The rotation origin is the reference point.



1.9. Perspective settings developments

1.9.1. Resizable perspective view setting

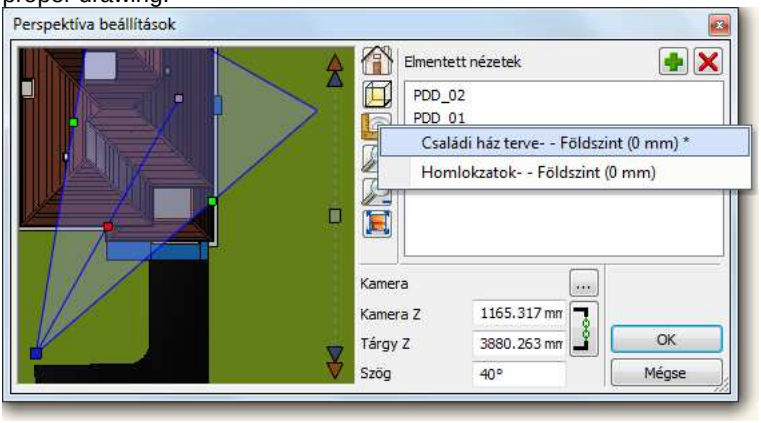
The perspective dialog is simplified in ARCHLine.XP. It has all the necessary features, and you can also resize it by the bottom left or right side of the dialog. This helps to review large and complex scenes.



You can see the top view of a model by default.

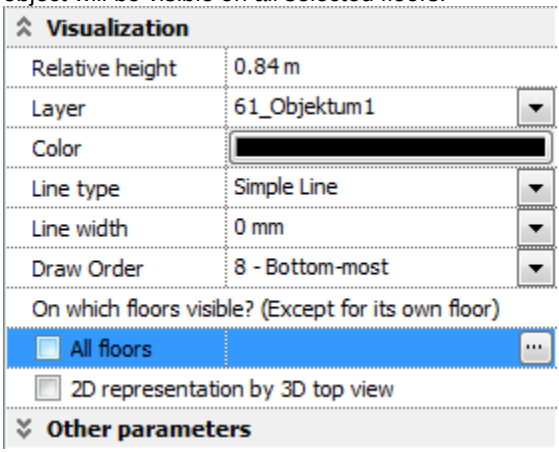
1.9.2. Visualize any 2D drawings

When the project contains more than one 2D drawing, by clicking on the 2D view icon, a pop menu will appear letting you choose the one that contains the proper drawing.



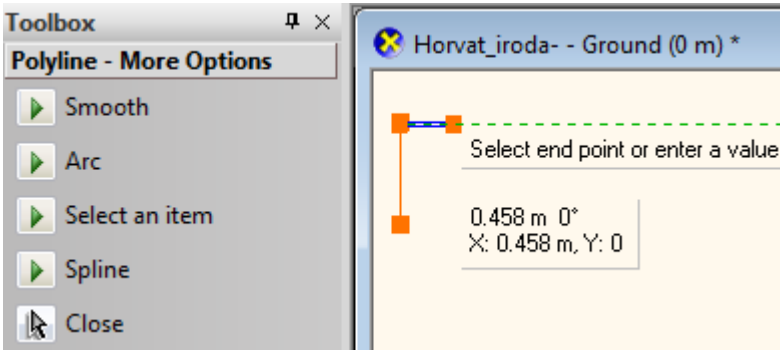
1.10. Object, Group: 2D symbol on multiple floors

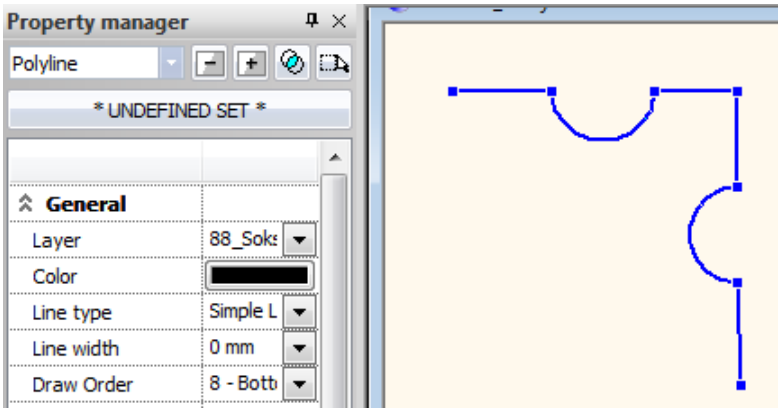
In the property dialog of the objects you can set the visibility of an object to multiple floors. If you click on the browse (triple-dots) button you can select the desired floors. If you tick the all floors option ON then the 2D symbol of the object will be visible on all selected floors.



1.11. PLINE tool with arcs

You can use the PLINE tool on both 2D and 3D window. The polyline can contain lines, arcs and splines as well.

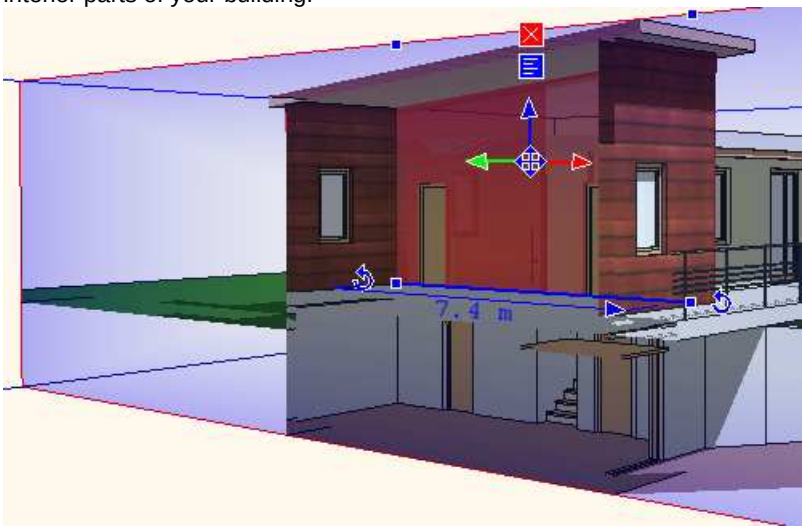




1.12. Improved dynamic 3D section

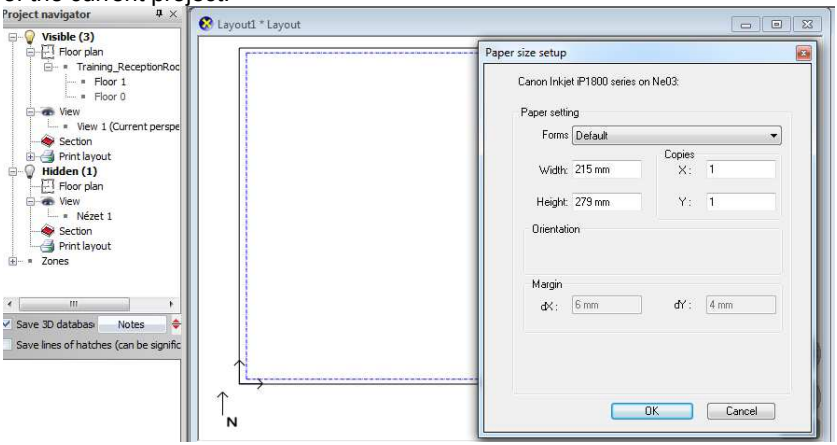
Using the dynamic 3D section (starting by a click on the section tool in a 3D window) the placement of the section plane is easy, the software will grab the plane by its middle point.

There is the possibility to “click through” the section plane. This will let you edit and change elements even in a dynamic section presentation mode.
This might be useful when you work on axonometric and you want to edit interior parts of your building.



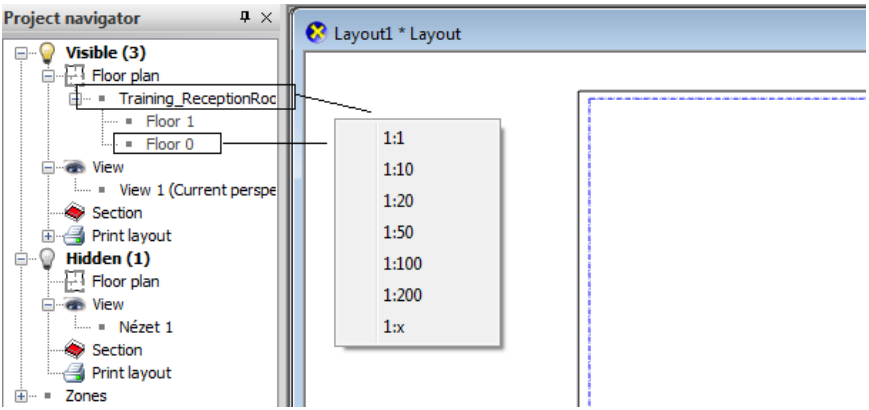
1.13. Improved Plot Layout tool

In the first step using the Prepare plot layout tool you can set the paper size and orientation settings. In the next step the Project navigator will appear from where you can drag and drop the drawings from the previously saved version of the current project.

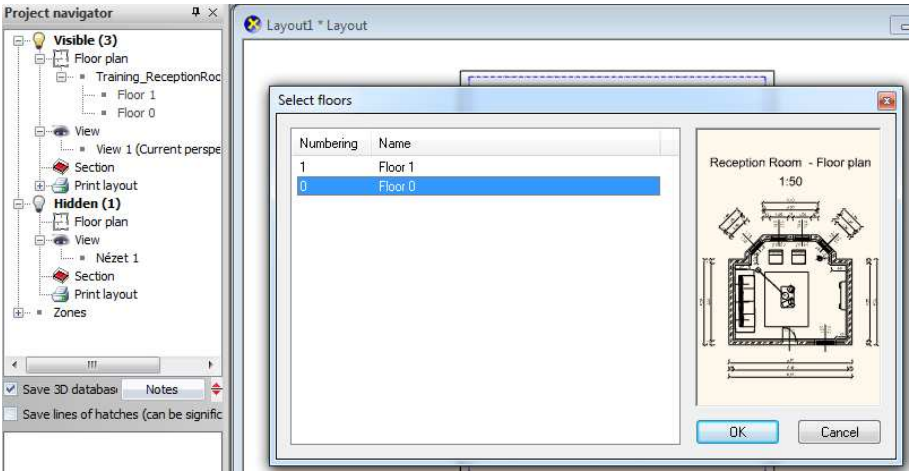


You can place one or more floors in one step if you drag the drawing name onto the printing layout window.

When you dropped the drawing you can set its scale factor.



If you wish to place only one floor, click on the floor plan name and drag it. If you wish to place more floors click on more floor name while holding the SHIFT button down.



1.14. Compatibility

The latest version of the program imports and exports drawings and models in AutoCAD 2010 and SketchUp 8 file formats.

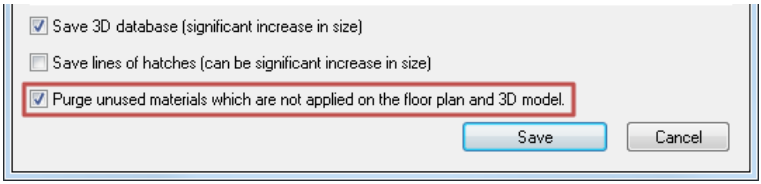
1.15. Lower system requirement

The entry-level computers, laptops, and facilitates the work of ARCHLine.XP the development of the 3D display is also prevalent in recent times, and rapidly developing technology, OpenGL call for help.

On the lower display capability, may not be specifically developed for the 3D design laptop also become available for use in the program, which it previously had a problem with DirectX technology. This development does not therefore aim to increase the speed, but the program's broader hardware compatibility.

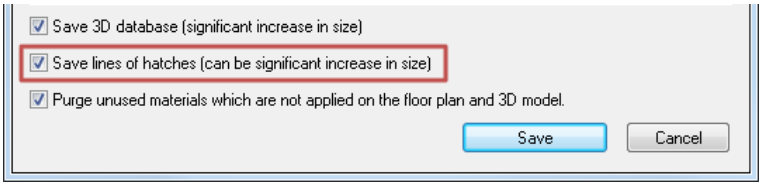
1.16. Purge unused materials

This function can be achieved by the project saving. The materials which are not applied on the floor plan and 3D model will automatically deleted from the project, if this function is switched on. As a consequence your project size may decrease significantly.

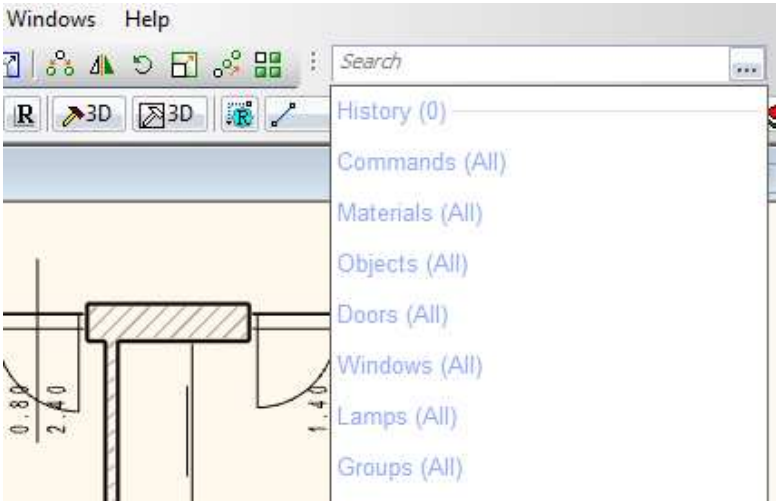


1.17. Save the lines of the hatch pattern

This function can be achieved by the project saving. The hatch component lines which are applied on the floor plan and vector line section views will be saved into the project, if this function is switched on. It results faster loading of the project next time when you open it. As a consequence your project size may increase significantly.



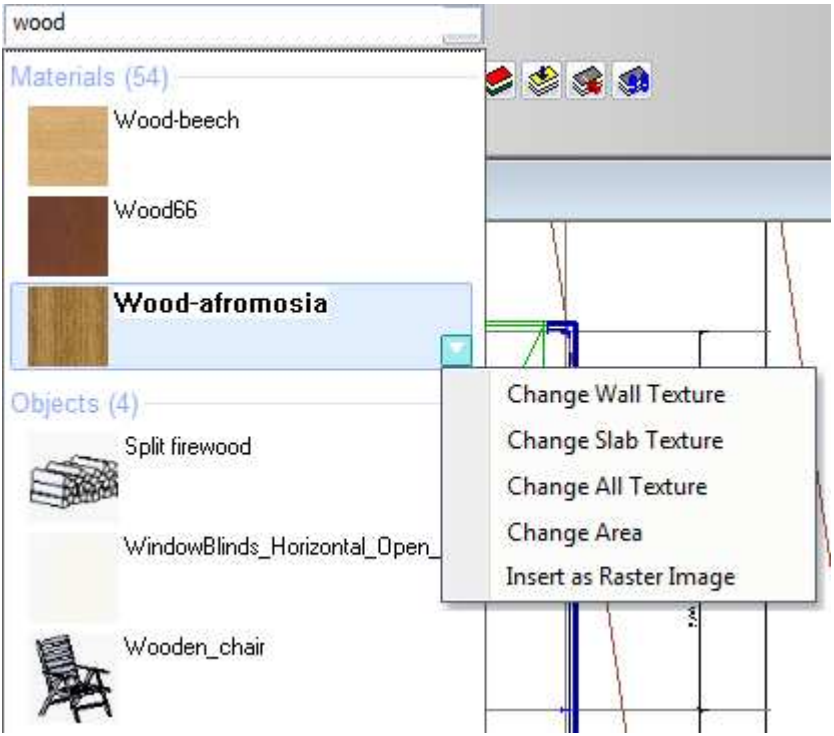
1.18. Quick Search



The Quick Search engine allows you to search within ARCHLine.XP commands, materials, objects, doors, windows, lamps or groups.

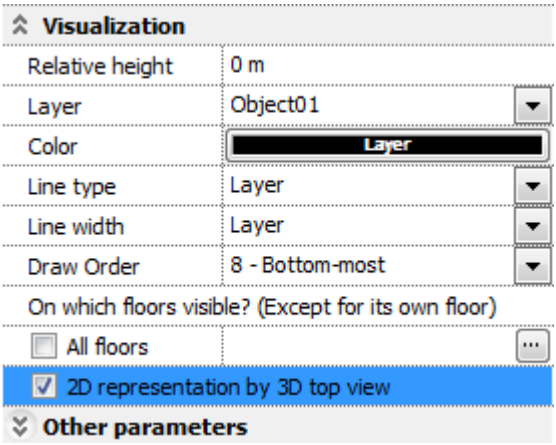
Simply start to type a word and Quick Search continuously displays the results whose names are partly or fully equal with the search term.

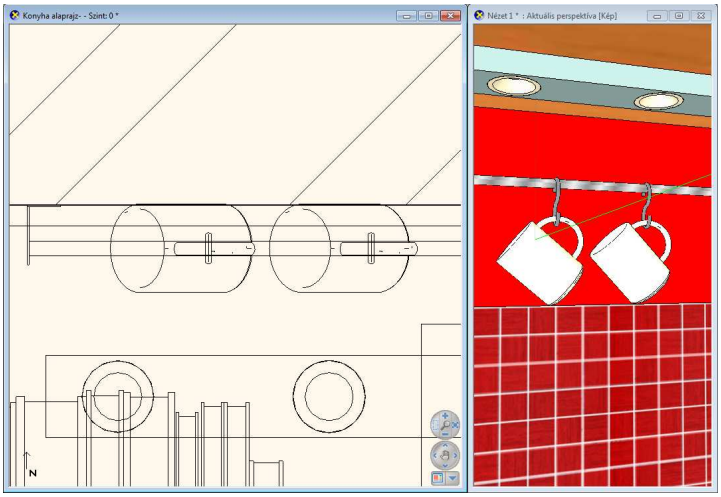
Click on the small arrow on the left side and choose a command to execute from the pop up menu.



1.19. Dynamic 2D symbol

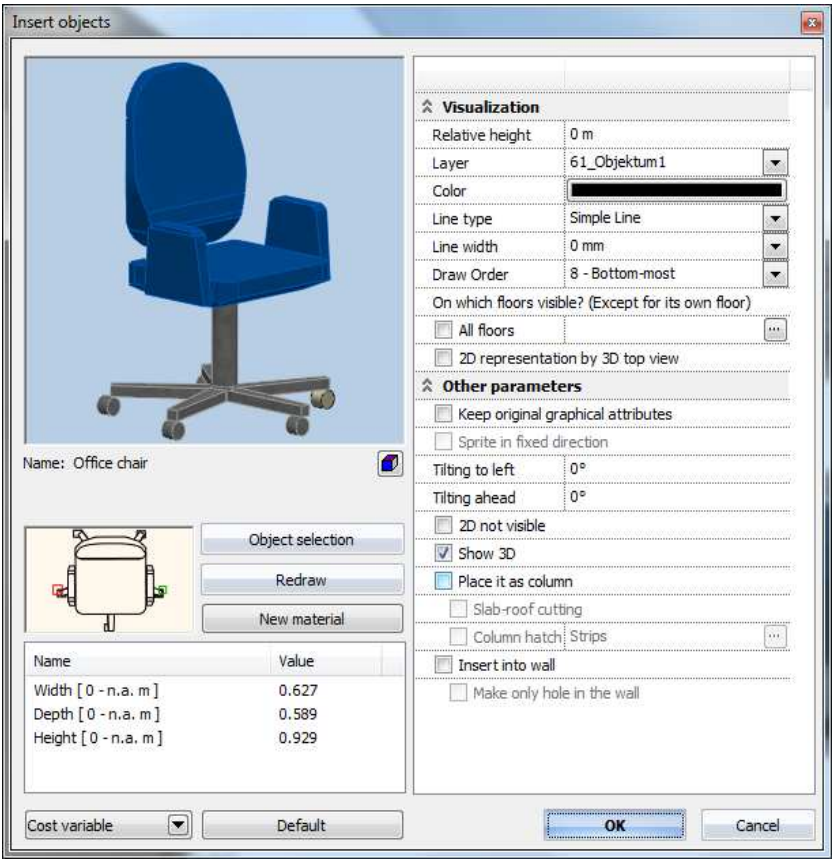
In the new version a dynamic 2D representation is also possible instead of the static 2D symbol of an object, to represent the real three-dimensional top view. You can switch between the two methods in the property window of the objects, columns, beams and pillars.





1.20. Compact object & opening properties dialog

The property dialog window of objects, doors and windows is unified and simplified in ARCHLine.XP 2011.



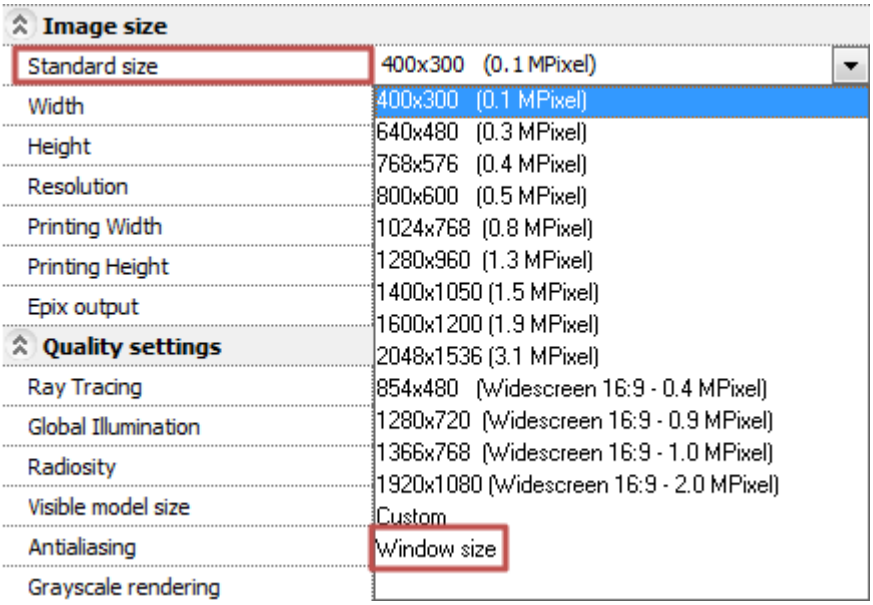
The most important change is that the dialog does not contain any controls for object selection. You can select a new opening or object directly from the Design Center by clicking on the **Object selection** button instead.

1.21. Rendering

1.21.1. Window size resolution

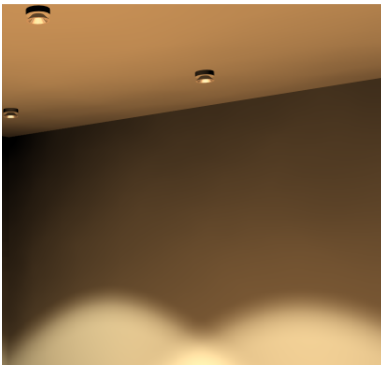
When opening the Photorealistic Rendering dialog, you can find the Window size option in the Image size section at the end of the Standard size list. With this option, the software will use the 3D window content size for rendering.

This option is very useful when you would like to see the same part of the scene in the 3D view and on the rendered image. Otherwise, because of the different ascpect ration you might see different borders for the rendered result as for the 3D view content when you use the standard sizes.

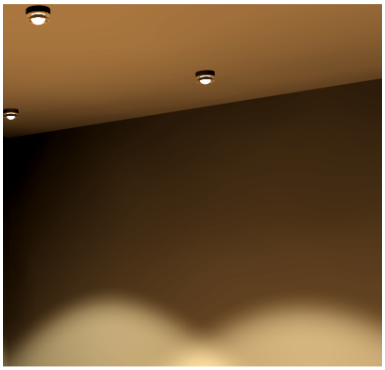


1.21.2. Light solid visible

The source of the light is usually not visible on renders, as they have no visible bodies in 3D space. By enabling the Light solid visible option, the software will generate tiny fake-light source-bodies where the light sources are present.



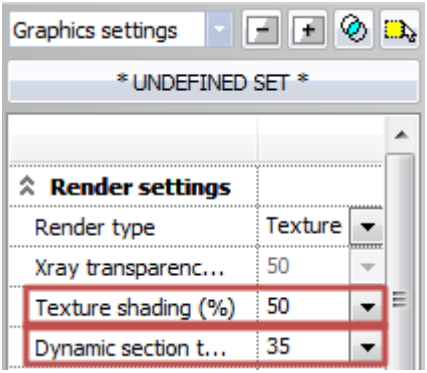
Light solids OFF



Light solids ON

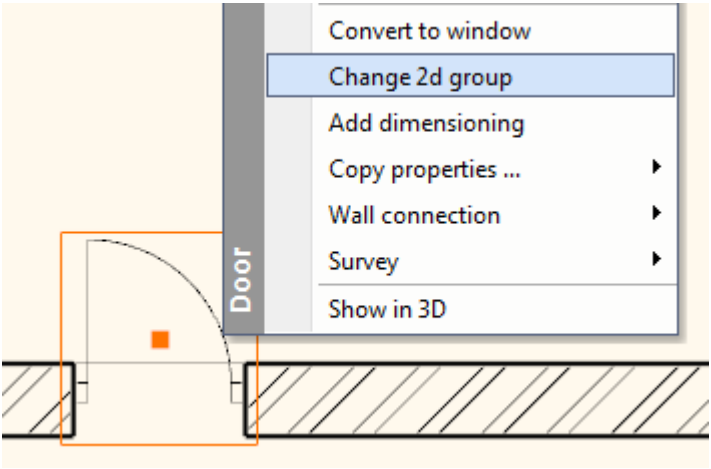
1.22. 3D Representation - Graphics settings

There are two options in the 3D Graphics setting in ARCHLine.XP to change the texture shading and the transparency of the dynamic 3D section plane.



1.23. Change door & window 2D group

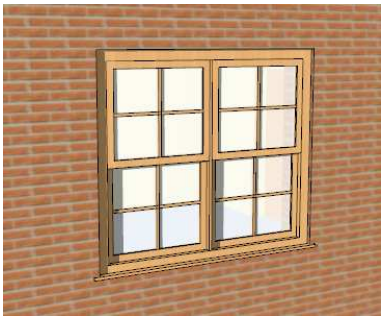
When you right click on the 2D symbol of a door or window, you can choose the Change 2D group command to change the actual 2D representation, using another already saved 2D group.



This way you can select any special 2D symbol to represent the openings on the 2D plans.

1.24. Window – Sliding up, double, divided

In the Sliding category of windows in ARCHLine.XP there is a sliding up, double divided window to make this specific window type easier to visualize.



The window can be found in Sliding category. Its name is: Sliding up double divided.

1.25. Online Collection

The Online Collection gives you the possibility to share and download objects or groups, even projects with the ARCHLine.XP community.

1.25.1. Export

You can export Objects, Doors, Windows, Groups, Lamps or even projects if you open the File menu / Export / Collection dialog.

- Click on the icon of proper button to start uploading a certain item
- In the next step you can browse for an item, depending on your choice.
- Finally, your selection starts to be uploaded to a temporary storage space and the Collection page will open.

- Please Log in, an follow the online instructions to finalize your upload.

If you do not have a login access, please register, or contact your distributor.

1.25.2. Import

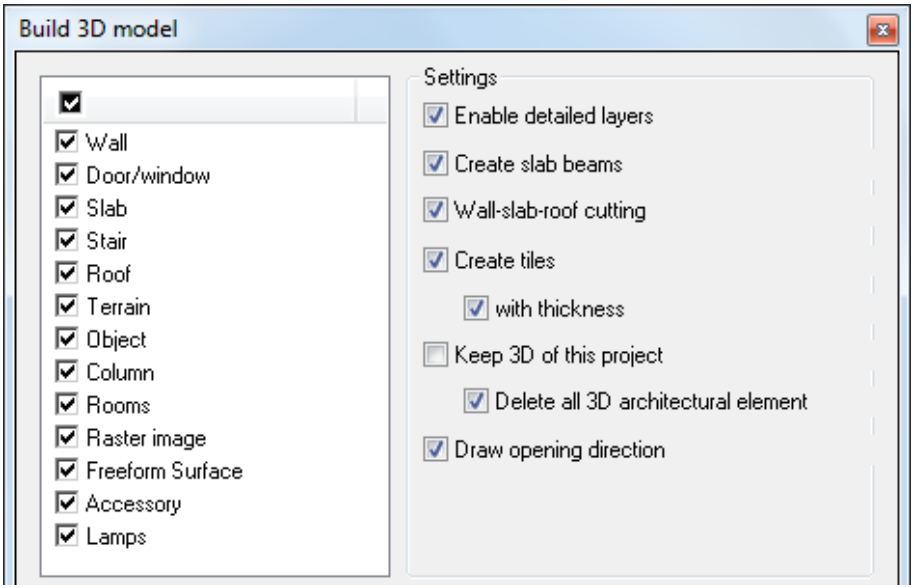
You can import ARCHLine.XP Collection items, uploaded by other users.

To reach this feature, please open File menu / Import / Collection.

- Please choose an item type to start connecting to ARCHLine.XP Connection website.
- Depending on your choice a webpage will open, where you can browse in different categories and items, uploaded by other users.

1.26. Build 3D model – lamps & accessory

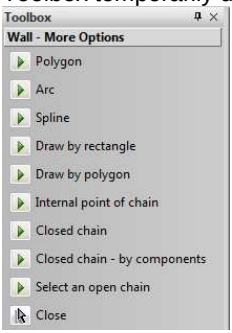
In the Build 3D model dialog you can filter the 3D model for lamps and accessories also.



When you disable one of these options, they won't appear in 3D when the model is refreshed.

1.27. Subcommands

Subcommands are actually keywords, which can change the flow of a command when you need it. For example when you start the wall tool, you will see that the Toolbox temporarily disappears and the following subcommand menu opens.

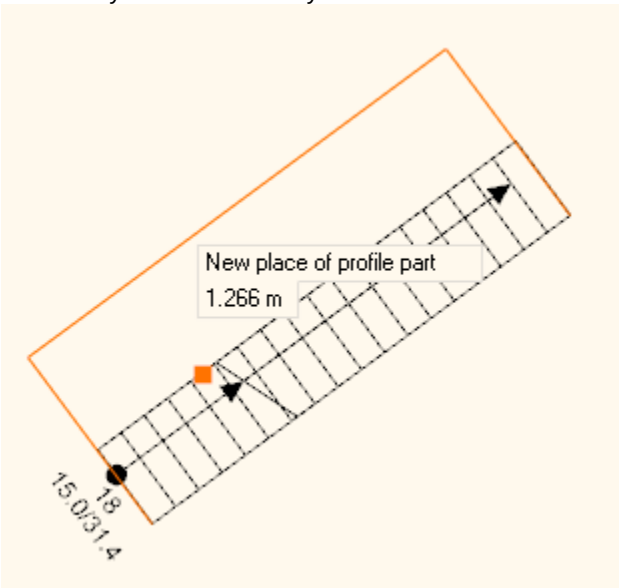


These options will let you create a wall by multiple ways.

It is very important to say, that if you do not want to change the command, you do not need to choose anything from this list of More options. These are just possibilities that you can use when necessary, or you can just ignore when not.

1.28. Stair contour offset

Stair contour offset lets you handle one side of a stair as a single unit, instead of edit it thread-by-thread or node-by-node.



Right click on the stair symbol, and choose Edit one side / Offset.

2. Virtual staging

Virtual staging is a fast easy and economical way to illustrate the complete potential of a vacant property.
No need to rent furniture, organize the staging, take good quality photos, etc.
ARCHLine.XP new Virtual Staging module allows you to create realistic images using photographs of the vacant property by simply adding furniture and other decorative elements to the photos.

To furnish a room, use **Indoor virtual staging**, to visualise a building in its real environment use **Outdoor virtual staging**. The two methods are essentially equivalent, we demonstrate here the use of the indoor virtual staging, mentioning the outdoor version where the two methods are different.

You can find the necessary commands in the **Add-On / In/Outdoor Virtual Staging** menu.

2.1. Importing raster Image

Select **Add-On / In/Outdoor Virtual Staging / Rendering**, choose an image file (the picture of the room), and place it in the 3D window.

2.2. Setting up reference 3D model

The next step is placing a 3D reference mode (a rectangular block) in the 3D window. We will align the edges of this model to the imported photo.

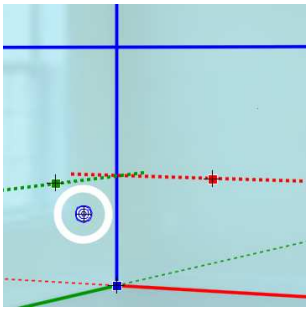
First select **Add-On / In/Outdoor Virtual Staging / Set up reference 3D model** and then enter the dimensions of the model. Use dimensions which make the aligning to the photo easier, for example use the height of the room as the model height. Finally place the model in the 3D window (There is no need for precise positioning here.)

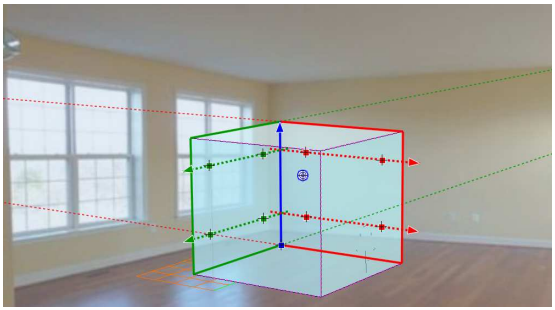
2.3. Setting up perspective

The next step is aligning the edges of this model to the imported photo.
Select **Add-On / In/Outdoor Virtual Staging / Set up reference perspective**. The reference cube appears with coloured edges on the screen.

2.3.1. Setting the position of the view point

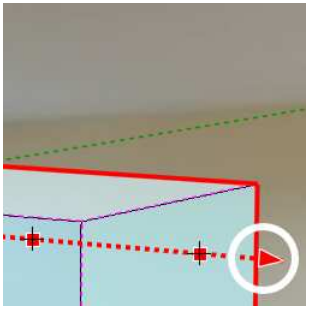
First move the view point roughly to the center point of the picture.

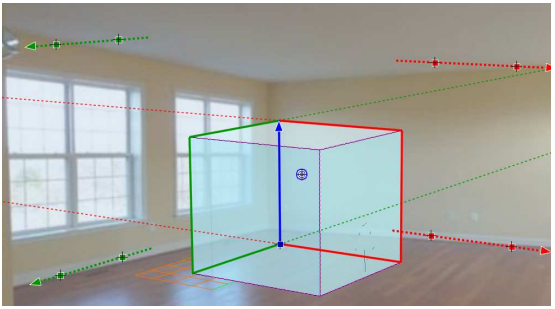




2.3.2. Positioning the dashed lines

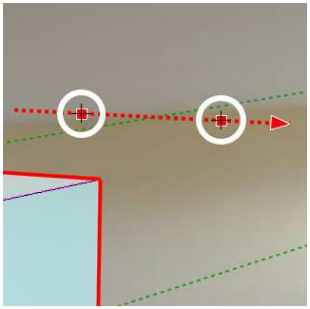
Click on a red arrow or on the red dashed line and move the line near a corner edge of the. There is no need for precise positioning at this point. Repeat the operation with the other red and the two green dashed lines.

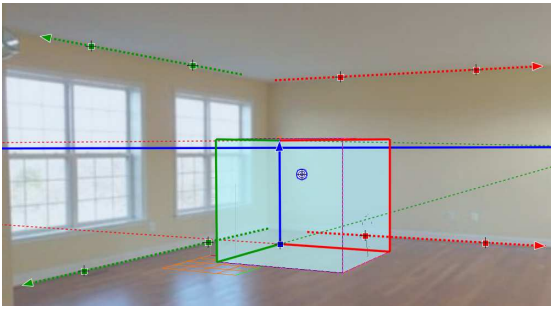




2.3.3. Aligning the dashed lines

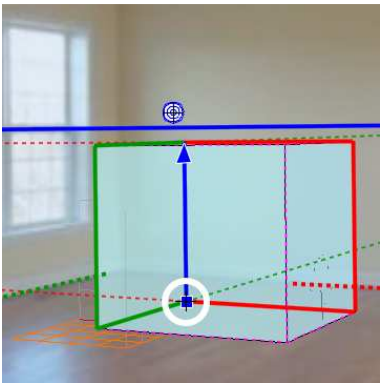
Align a red dashed line to an edge of the room: click on a red square on the line and move it onto the edge and then move the other red square, too. Align the other red and the other two green lines to the appropriate edges of the room.

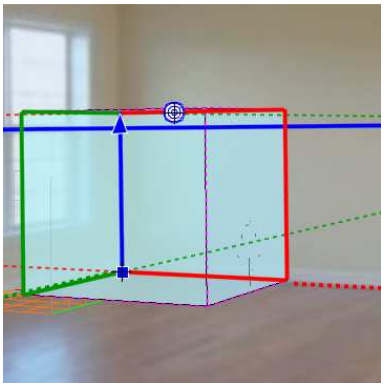




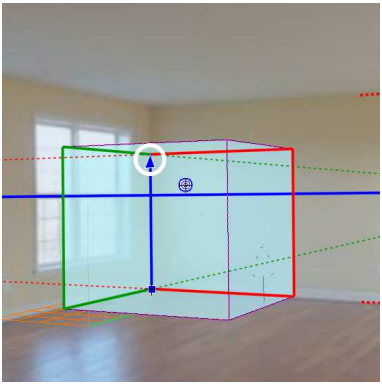
2.3.4. Positioning the 3D reference model

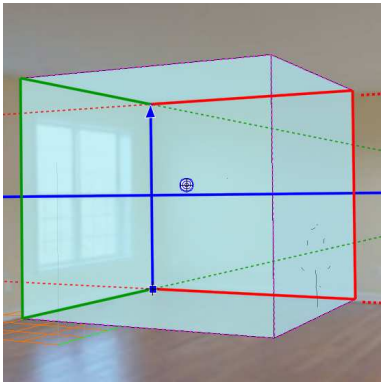
Click on the blue arrow and move the reference model to the appropriate corner of the room.



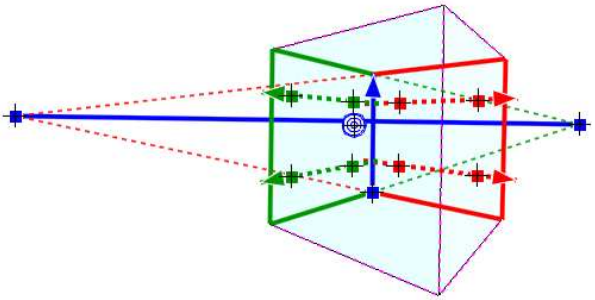


Finally click on the blue arrow and resize the 3D reference model according to the underlying picture.



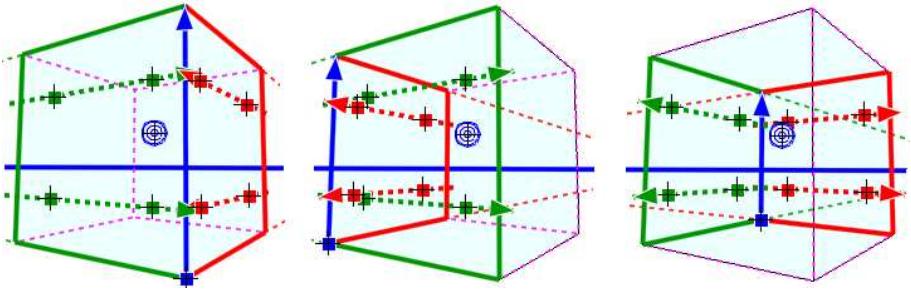


It is possible to refine the perspective: you can replace the focus points by clicking on the thin dashed line or on the endpoints of the thick blue horizon line. You can elevate the horizon line by clicking on it.



.

In case of outdoor virtual staging you can replace the red and green planes by clicking the edges of the 3D reference model.



Press ENTER to apply changes and finish the operation.

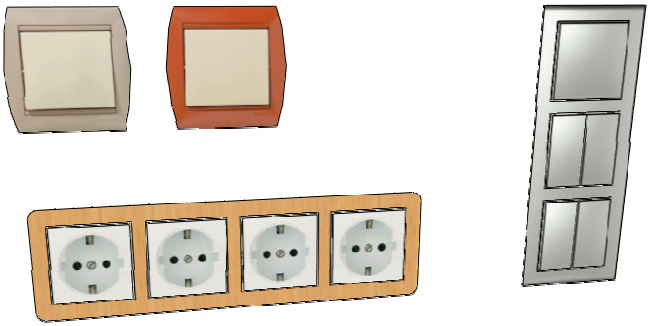
2.4. Refining Perspective

You can modify the perspective any time by selecting **Add-On / In/Outdoor Virtual Staging / Refine perspective** command. You can work with the same tools like described in the previous section.

2.5. Rendering

Select **Add-On / In/Outdoor Virtual Staging / Rendering** command and set the Rendering Properties. 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”. Finally the **ArchLINE Image** application appears and opens these two files. You can compose the final image using this application. See chapter 15.4.4.in User’s Manual

3. Electrical accessories



3.1. Working with Electrical accessories

3.1.1. 3D representation

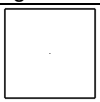
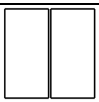
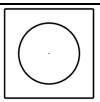
To get the simplest 3D model, you can represent the electrical accessory by a flat shape and a texture on it. To have a more detailed representation, just enable 3D switches or sockets, in this way you can determine the shape and the material of the switch or socket inside the border separately.

Flat shape with texture

Model with 3D switches or sockets

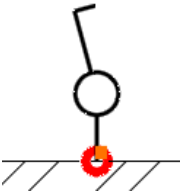
3.1.2. Shape of 3D switches and sockets

You can use any shape for 3D switches and sockets by selecting a profile from the profile library. You can assign shapes to functions by creating a profile and a symbol with the same name in the library. If the *Shape by Function* checkbox is enabled and you choose a function, the switch or socket will be represented by the related shape automatically.

2D symbol	 single switch	 double switch	 socket
Related shape (Profile) of the switch or socket	 single switch	 double switch	 socket

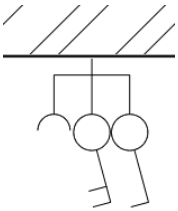
3.1.3. Custom 2D Symbols

On the floor plan you can represent an electrical accessory with its upper view or as a 2D symbol. You can use any 2D symbol as an electrical accessory representation; even you can create your own symbols. To have the appropriate placement, the symbol must have at least one hotspot and the symbol (and the front face of the 3D model) must be oriented upward.



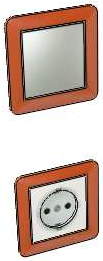
3.1.4. Grouping

Switches and sockets can be grouped in one frame horizontally or vertically. Each switch or socket in a frame can have a unique function.

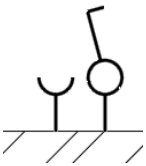


3.1.5. Shifting symbols

To make your 2D plans easier to understand; you can move and rotate the 2D symbol of the electrical accessory independent from the 3D model if necessary.



Switch above a socket in 3D



Symbols next to each other on the floor plan

3.2. Creating an Electrical accessory

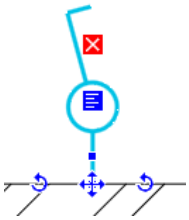
First set the default properties of the Electrical accessory by selecting **Building / Properties / Electrical Accessory** in the Toolbox (Furnishing **/ Properties / Electrical Accessory** in the Interior version). You can place an Electrical accessory by selecting **Building / Indoor Tools / Electrical Accessory** (Furnishing **/ Electrical Accessory** in the Interior version). This command works differently on the floor plan and in the 3D window.
On the floor plan place the symbol by the first click typically on a wall edge, then set the rotation by the second click. Repeat this to place more elements or press ENTER or ESC to quit.
In the 3D window first select a surface then place the symbol on that surface. Repeat this to place more elements or press ENTER or ESC to quit.…

3.3. Modifying the 3D model

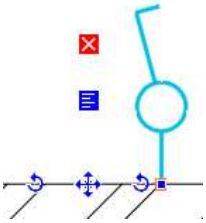
There is no further command in the Toolbox or in the main menu related to the electrical accessories; you can work with them by using the markers or changing their properties.

3.3.1. Marker menu commands

In case of using a symbol for the 2D representation, a small node marker appears on a selected electrical accessory, by using the marker commands on it you can shift the symbol independent from the 3D model.



Symbol in default position



Shifted symbol

Shift Symbol

You can move the symbol independent from the 3D model.

Rotate Symbol

You can rotate the symbol independent from the 3D model.

Reset Symbol

You can reset the symbol to its original position.

3.4. Settings

3.4.1. Position

Relative Height

Elevation from the floor level.

Absolute height

Elevation including the floor level.

3.4.2. Function

Function

The name of the 2D symbol.

Use Symbol in 2D

If selected, the electrical accessory is represented by a 2D symbol, otherwise by a simple rectangle with real dimensions.

Symbol Scale

You can rescale the 2D symbol by this value.

3.4.3. Design

Shape

The outer profile of the electrical accessory.

Material

The material of the electrical accessory. If '3D Switches and Sockets' are enabled, this material is applied to the border.

Width

The whole width of the electrical accessory.

Height

The whole height of the electrical accessory.

Thickness

The thickness of the electrical accessory. If '3D Switches and Sockets' are enabled, it is applied to the border.

3.4.4. Grouping

Number of Elements

Number of switches or sockets in a single frame.

Same Functions

If enabled, all the switches or sockets in a single frame have the same function and will be represented by the same symbol.

Direction

Describes whether the switches or sockets will be placed side by side or one above the other.

Offset

The distance between the midpoints of two switches or sockets in a single frame.

Symbol Offset in 2D

The distance between the insertion points of two symbols on the floor plan.

3.4.5. 3D Switches and Sockets

Enabled

If enabled, 3D switches or sockets appear in the frame; otherwise the whole electrical accessory will be represented as a single shape described in the 'Design' part.

Shape by Function

If enabled, the profile of which name equals to the 2D symbol name is automatically used as the shape of the 3D switch or socket.

Shape

The profile which is used as the shape of the 3D switch or socket.

Material

Material of the 3D switch or socket.

Width

Width of the 3D switch or socket.

Height

Height of the 3D switch or socket.

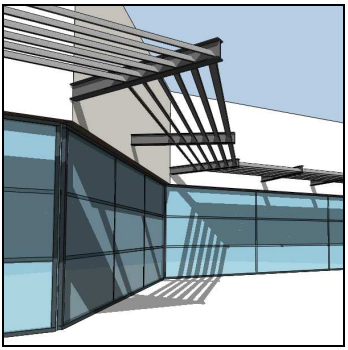
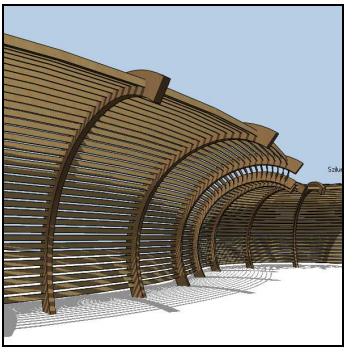
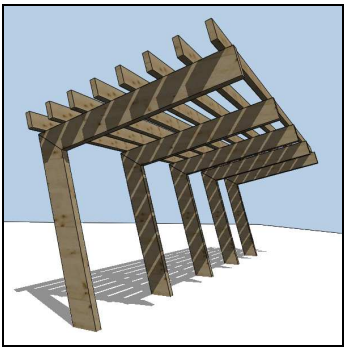
Thickness

Thickness of the 3D switch or socket.

Border Gap

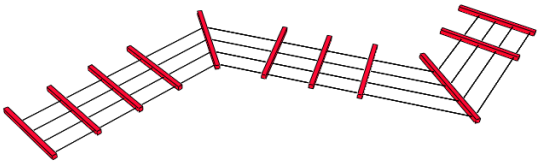
Space between the border and the 3D switch or socket.

4. External louvres

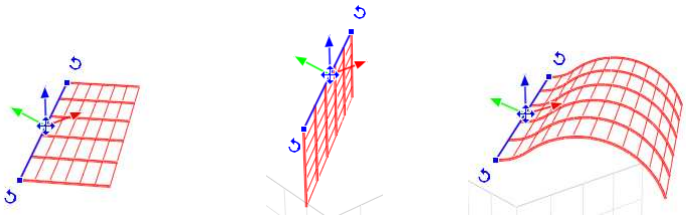





4.1. Working with External louvres

4.1.1. Frames

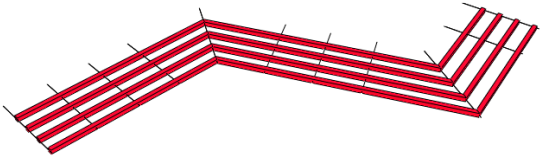


An external louvre is based on a profile drawn on a floor plan. Frames are structures perpendicular to the floor plan path. They can be horizontal, vertical or you can define a custom frame by selecting *Define custom frame* command from the Popup menu.

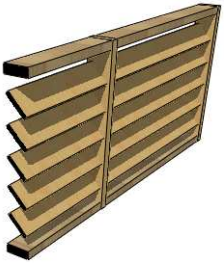


Horizontal Vertical Custom

4.1.2. Louvres

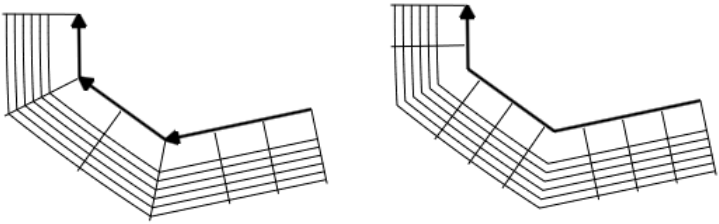


Louvres are structures parallel to the floor plan path. You can rotate them around their axis and use a different louvre type for the first and last position.



4.1.3. Distribution of frames and louvres

By setting the frame distribution you can enable or disable frames on path nodes:

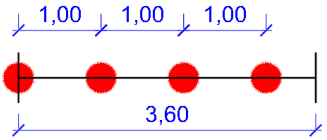


Frames on path nodes enabled Frames on path nodes disabled

The main rules of frame and louvre distribution are the same. On a given distance you can distribute frames or louvres in three different ways:

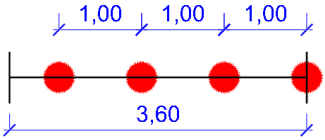
Align to start point

The exact spacing value (1.00) is used



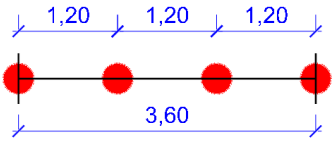
Align to end point

The exact spacing value (1.00) is used



Evenly distributed

The spacing value (1.00) is modified



4.2. Creating an External louvre

First set the default properties of the External louvre by selecting **Building / Properties / External louvre** in the Toolbox.
You can place an External louvre by selecting **Building / Outdoor Tools / External louvre**. Draw an open profile by means of the *Profile definition* tools. While drawing the profile, you can mirror the structure to the path by selecting *Change offsets to the other side of the path* form the Toolbox.

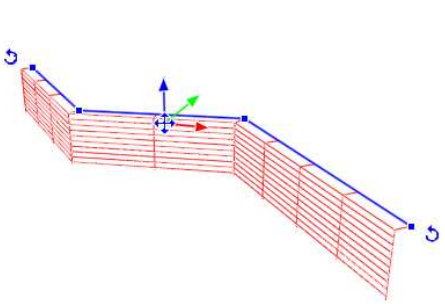
4.3. Modifying the 3D model

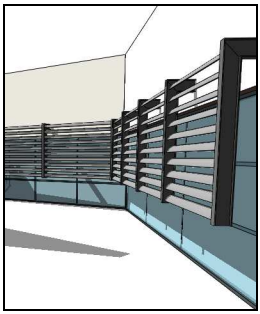
There is no further command in the Toolbox or in the main menu related to the External louvres; you can work with them using the Popup menu and the markers.

4.3.1. Popup menu commands

Define custom frame

To define a custom frame, first draw an open profile, and close the definition by pressing ENTER. Finally click on the insertion point of the profile (the frame will be aligned to the main path by this point)





This command is available only on the floor plan.

4.3.2. Marker menu commands

You can modify the floor plan path by using the following marker commands:

- Move Node
- Delete Node
- Insert Node
- Offset
- Turn Into Curved Edge
- Turn Into Straight Edge
- Change Arc
- Change Radius

4.4. Settings

4.4.1. Position

Relative Height

Elevation from the floor level.

Absolute Height

Elevation including the floor level.

4.4.2. Frame

Frame Type

Horizontal, vertical or custom. You can define a custom frame path by selecting the 'Define custom frame' command.

Frame Size

Length or height of the frame.

Section Profile

Section Profile of the frame.

Material

Material of the frame.

4.4.3. Frame Distribution

Spacing

Distance between frames.

Frames on Path Nodes

If enabled, frames will be placed on each nodes of the floor plan path, and other frames will be distributed among them.

Offset of First Frame

Distance between the beginning of the floor plan path and the first frame.

Offset of Last Frame

Distance between the end of the floor plan path and the last frame.

Distribution Mode

You can align the sequence of frames to the first point or to the endpoint of the floor plan path, or distribute the frames evenly from the first point to the endpoint by changing the spacing value.

4.4.4. Louvres

Section Profile

Section profile of the louvres.

Rotation

Rotation of the louvres.

Material

Material of the louvres.

Different First and Last Lamella

If enabled, first and last louvres can have a different profile and material.

Section Profile

Section profile of the first and last louvres.

Rotation

Rotation of the first and last louvres.

Material

Material of the first and last louvres.

4.4.5. Distribution of Louvres

Spacing

Distance between louvres.

Offset of First Louvre

Distance between the beginning of the frame and the first louvre.

Offset of Last Louvre

Distance between the end of the frame and the last louvre.

Distribution Mode

You can align the sequence of louvres to the first point or to the endpoint of the frame, or distribute the louvres evenly from the first point to the endpoint by changing the spacing value.

Overhang at the First Frame

Distance between the start point of the louvre and the first frame.

Overhang at the Last Frame

Distance between the endpoint of the louvre and the last frame.

5. Indoor blinds

Two new indoor blind types are available in ARCHLine.XP 2011: venetian blind and vertical blind. Existing blinds (curtain, roman blind) are also changed and extended.

5.1. Working with Indoor blinds

Curtain

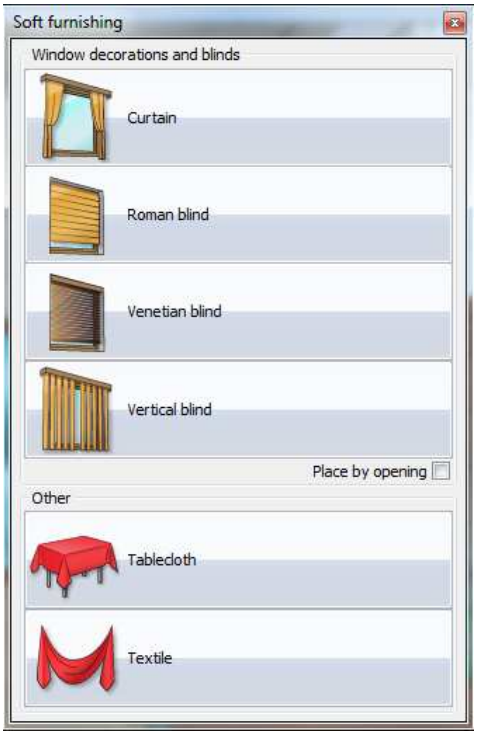
Roman blind

Venetian blind

Vertical blind

5.1.1. Creating indoor blinds

You can create an indoor blind by selecting an opening (door or window) to place the blind in it or by drawing it directly on the floor plan. These commands work only in the 2D window.



To create a blind in an existing opening select **Building – Indoor tools** (or ***Furnishing*** in the interior version) **– Curtain/Roman blind/Venetian blind/Vertical blind – By Opening** from the main menu and click on the appropriate side of a door or window.

To draw the blind on the floor plan, select **Building – Indoor tools** (or ***Furnishing*** in the interior version) **– Curtain/Roman blind/Venetian blind/Vertical blind – By Two Points** from the main menu and draw the bounding rectangle of the blind. You can mirror the rectangle to the blue line by pressing the TAB key.

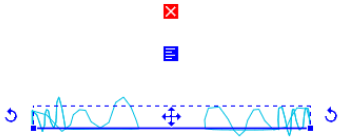
(From ARCHLine.XP 2011 Build 181 you can choose it in the dialog Place by opening checkbox.)

Once the indoor blind is placed a dialog appears and you can set the appropriate values. Finally the blind appears on the floor plan and in the 3D window.

CadLine

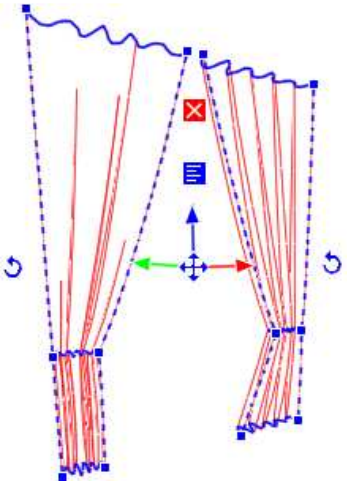
5.1.2. Editing on the floor plan

Once the element is selected on the floor plan, you can edit it by means of the markers: by using the node markers you can change its length or move an endpoint. By using the Offset command of the line marker you can move the element perpendicular to itself.



5.1.3. Editing as freeform surface

You can edit the indoor blind as a general freeform surface selecting it while the ALT key is pressed or by clicking with right mouse button on the element and selecting the “Edit as freeform surface” command. In this view it is possible to move each individual node of the model, fix edges to the appropriate position, etc.



Note that if you use the dialog to modify the properties of the blind or use the blind editing command mentioned in the previous section, the model will be rebuilt and all these changes will be lost.

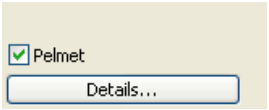
5.1.4. Converting blinds

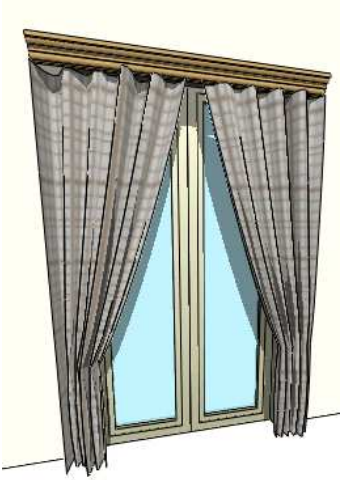
Each indoor blind can be easily converted to another by clicking on it with right mouse button and selecting **Convert to**… command. You can convert an indoor blind to a general freeform surface, too.

5.1.5. Pelmet

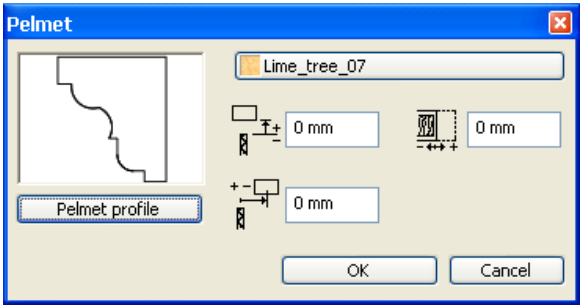
Curtains and Vertical blinds can have a pelmet attached to them. A pelmet is a simple profile aligned to the top of the blind.

To attach a pelmet to the curtain or vertical blind enable the Pelmet checkbox in the properties dialog.





Pelmets can be configured by some simple settings:



Pelmet profile

The section profile of the pelmet. The hotspot of the profile will be aligned to the top of the curtain.

Material

The material of the pelmet.

Vertical offset

You can elevate the pelmet by changing this value.

Vertical offset

You can shift the pelmet perpendicular to the curtain.

Overhang

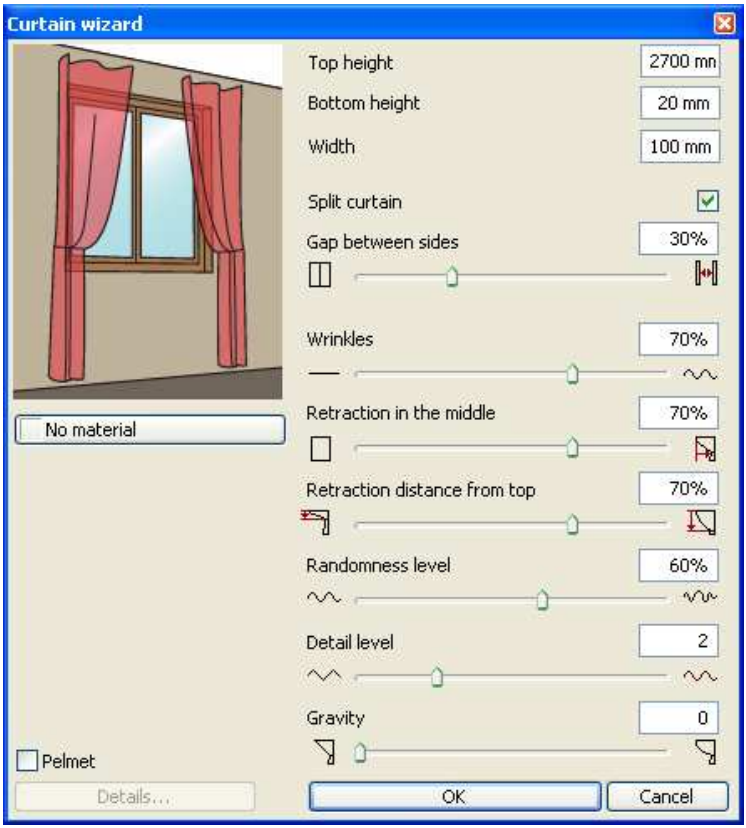
You can lengthen / shorten the pelmet by changing this value.

5.2. Indoor blind types

Each blind type has its own setting dialog. Once you have placed the blind on the floor plan, the dialog appears and the blind will be created based on the values set in it.

To modify an indoor blind right click on an element and select **Properties**.

5.2.1. Curtain



Top height

The height of the top of the curtain from the story level.

Bottom height

The height of the bottom of the curtain from the story level.

Width

The width of the bounding rectangle of the curtain.

Split Curtain

If enabled, curtain is split into two parts.


Split curtain enabled

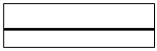

Split curtain disabled

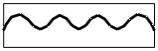
Gap between sides

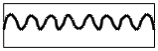
You can define the distance between the two parts of a split curtain.

Wrinkles

By means of this slider you can adjust the wave-form of the curtain. The lowest value results in a straight line.

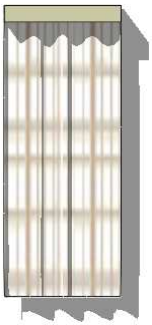

Wrinkles: 0%


Wrinkles: 50%


Wrinkles: 100%

Retraction in the middle

By setting this slider to the lowest value you can define a straight curtain without retraction, otherwise the middle of the curtain will be retracted towards the second point of the bounding rectangle.


Retraction in the middle: 0%


Retraction in the middle: 50%


Retraction in the middle: 100%

Retraction distance from top

If the “Retraction in the middle” value is positive, here you can set the vertical position of the retraction. By setting it to 0% or 100%, the upper or lower edge will be retracted instead of the middle of the curtain.

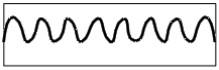
Retraction distance from top: 0%

Retraction distance from top: 50%

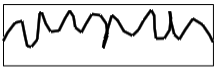
Retraction distance from top: 100%

Randomness level

You can choose between regular and random wave-forms.



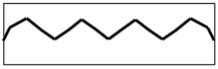
Randomness level: 0%



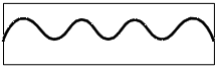
Randomness level: 100%

Detail level

The resolution of the freeform surface.



Detail level: 1



Detail level: 5

Gravity

The textile can “fall down” realistically by increasing the gravity value.

Gravity: 0

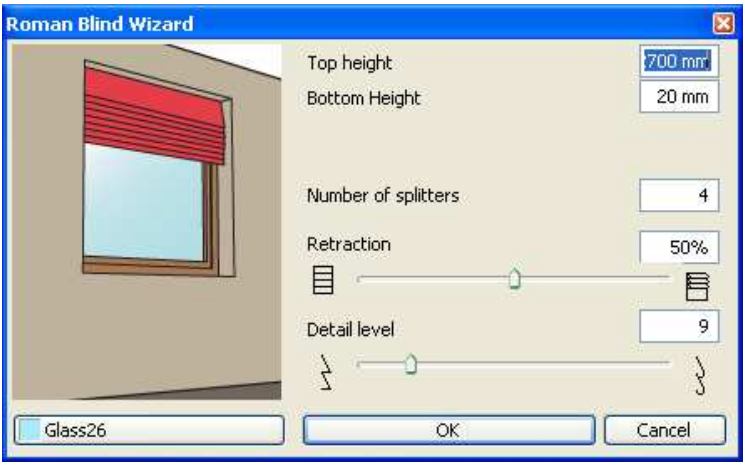
Gravity: 2

Gravity: 4

Material

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

5.2.2. Roman blind



Top height

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

Bottom height

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

Number of splitters

The number of horizontal divisions can be set here.

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%

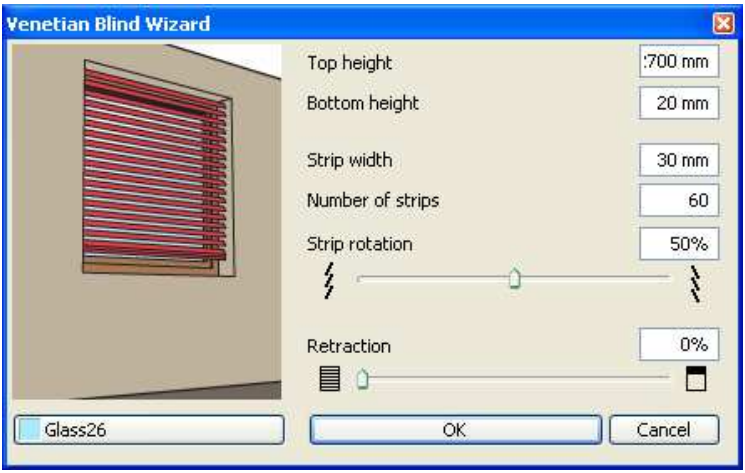
Detail level

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.

Material

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

5.2.3. Venetian blind



Top height

The height of the top of the curtain from the story level.

Bottom height

The height of the bottom of the curtain from the story level.

Strip width

The width of a strip.

Strip rotation

The rotation of the strips. The 50% value results in horizontal strips. The maximum rotation angle is 80°in both directions

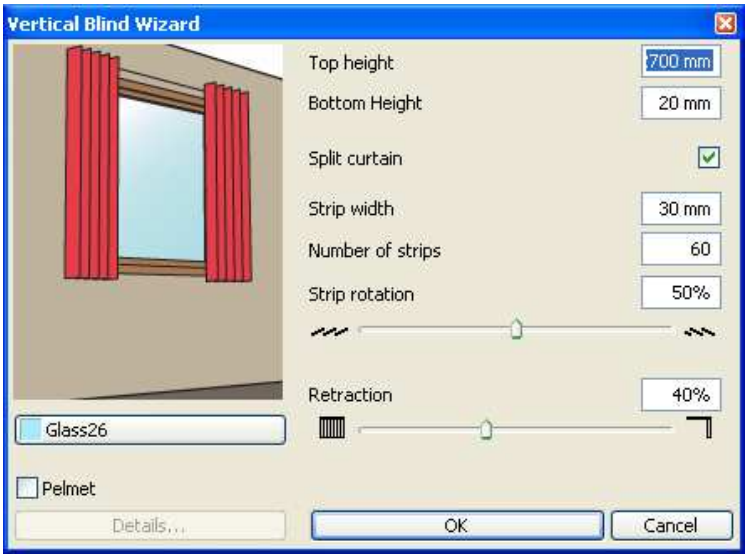
Retraction

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

Material

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

5.2.4. Vertical blind



Top height

The height of the top of the curtain from the story level.

Bottom height

The height of the bottom of the curtain from the story level.

Split Curtain

If enabled, curtain is split into two parts.

Split curtain enabled

Split curtain disabled

Gap between sides

You can define the distance between the two parts of a split curtain.

Strip width

The width of a strip.

Strip rotation

The rotation of the strips. The 50% value effects strips perpendicular to the plane of the opening. The maximum rotation angle is 80° in both directions.

Retraction

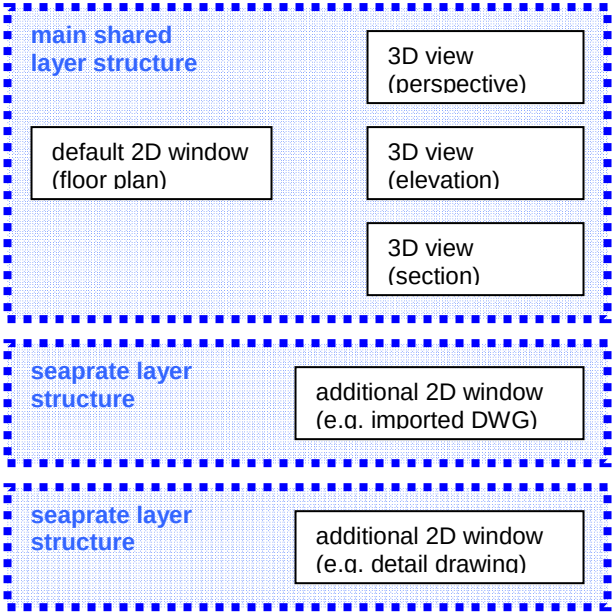
The lowest value means a fully shut blind, and the top value means a fully opened one.

Material

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

6. Unified Layer Management

In former versions of ARCHLine.XP each of the drawing (including 3D views) in a project had its own layer structure. In ARCHLine.XP 2011 3D views and the floor plan share a single layer structure:



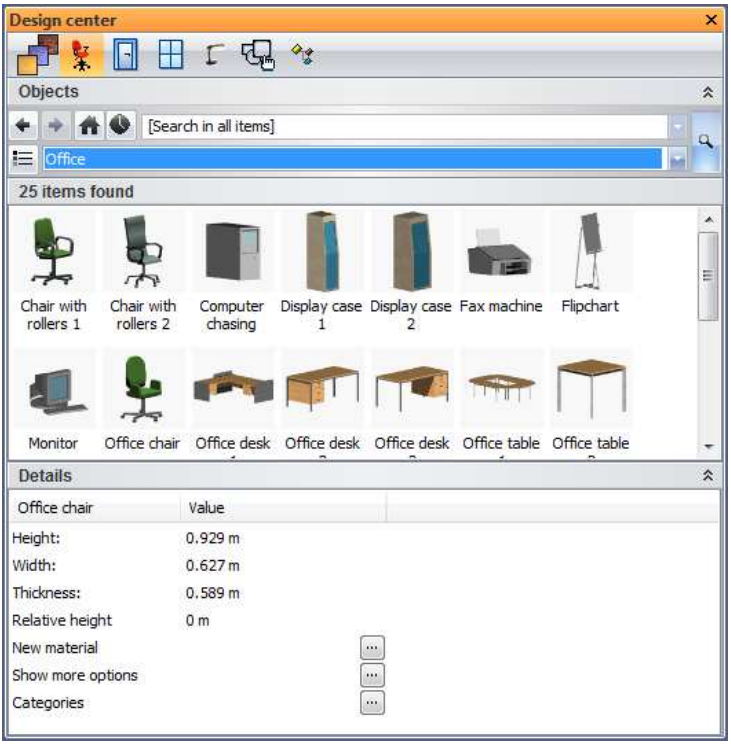
If you create, rename or delete a layer in the default 2D window, you can view the changes in the 3D window, and vice versa.

If you create a project in version 2011, the first 2D window becomes **"default"**; this caption appears in the header of the window. All of the projects created in the former versions are unchanged even in ARCHLine.XP 2011. The new layer management is available only with projects **created** in version 2011.

7. Design center

The Design center helps finding the elements quickly even in a large database. There is no folder-based listing, while the software keeps its beneficial structure in the categories.

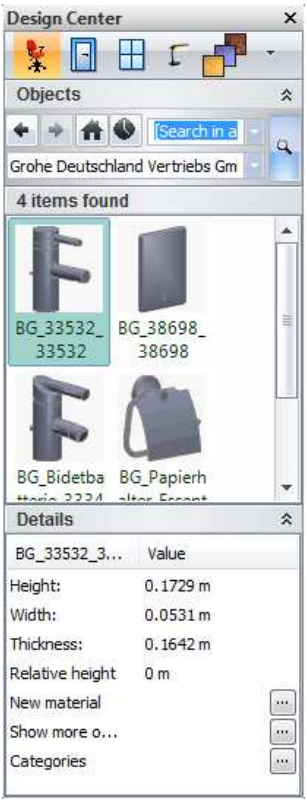
If you feel that from huge amount of objects it is almost impossible to find the right one in a minute, you should get to learn the Design center.



The Design center can display and manage the following elements in one single interface: Materials, Objects, Doors, Windows, Lamps, 2D groups, Sets.

7.1. Design Center interface

There are 4 main parts of the interface of the design center.



◄ **Header**

◄ **Item type list**

◄ **Content panel**

◄ **Details panel**

7.1.1. Design Center – Header

Using the buttons in the header you can hide or switch off the Object Center.

7.1.2. Design Center – Item type list

You can choose an item from the item type list. This way the software will show you the element only from the selected item type. These are the types one can choose from:

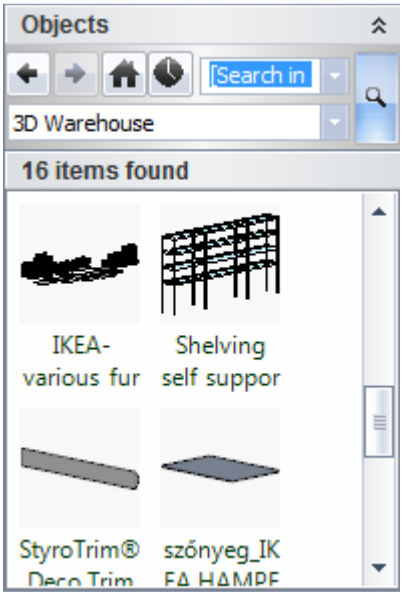
- Objects
- Doors

- Windows
- Lamps
- Materials
- Groups
- Sets

If the Item type list is too narrow to show all the possible icons, you can see a small arrow at the end of the row. Click on it to see the remaining types.

7.1.3. Design Center – Content panel

The Content panel of the Design Center has the following main parts:



◄ **Header**

◄ **Finder**

◄ **Search result summary**

◄ **Results / Content**

7.1.3.1. Content panel – Header

You can see the actually selected item type name in the header of the content panel (e.g.: Objects). You can expand and collapse the content panel by clicking on the double arrow at the right corner of the header.

7.1.3.2. Content panel – Finder

In the Finder of the content panel you can filter & search elements and reach the previous results also.

You can find the following controls in the Finder:

- **Previous results**
  You can re-execute a search with the previous conditions to see the results of your previous search again.

- **Following results**
  You can re-execute a search with the conditions to see the results of your next search again. This button is available only if you already used the previous results button.

- **Home / Categories**
  When you push the Home / Categories button, the software will jump to the category view, which is the highest level. Here you can see the categories, represented as virtual folders, and you can actually open them to see their content.

- **Last used items**
  When you press the Last used items button, the software will show them I a short list.

  This feature can be very useful when you want to use an item again which you found just before, as you do not need to search for it again.

- **Search field**
  You can use any word or part of it in the search field. The phrase given here will be used to examine if it exists in the name of the items.

  When you would like to use a previously typed phrase again, you do not need to enter it, as the software continuously records them. All you need to do is just click on the small arrow at the end of the search field, and you can choose any of the phrases you used earlier.

If you do not want to give a search phrase, just select the [Search in all items] option.

- **Category filter**
  You can find all the previously created categories in the Category filter. (You can define categories, for example when you create an object.) This way you can narrow your search only to a certain category.

  If you do not want to filter for categories, just select the [Search in all categories] option.

- **Search button**
  You can start the search with the given conditions when you hit the Search button.

7.1.3.3. Content panel – Search result summary

The search result summary shows how many items matched the search conditions.

7.1.3.4. Content panel – Results/Content

You can find the result of the search in this part of the content panel. When you use the Home/Categories button, you can see the actual categories as virtual folders here.

When you select an item of the result, a part of its properties will appear at the bottom panel called Details.

Double-click on an item to see its detailed properties.

You can also use the Drag & drop method on an item of the search result. When you drop the item on a drawing the default command will be started, in case of objects it is the Place object command.

7.1.4. Design Center – Details panel

You can see a few of the selected item's details here. If the Details panel is empty it means that there is no selected item in the Results/Content field, or the selected item has no property that you can change this way (e.g.: Sets).

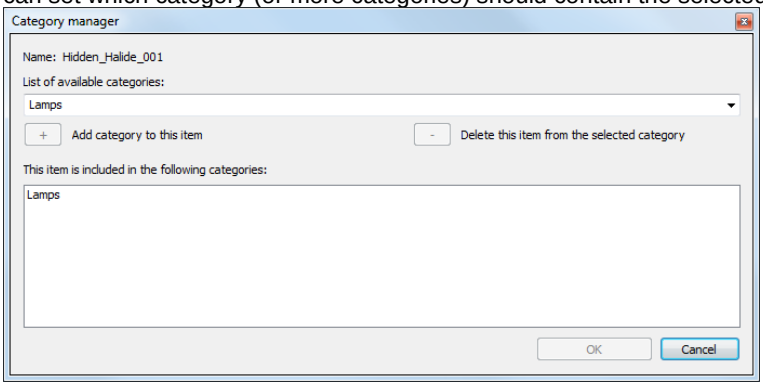
The list of properties you can access at the Details panel varies depending on the selected item's type. Some properties are commonly used, such as the following.

7.1.4.1. Show more options

At the end of the Show more options row you can find the modify button with triple dots. Please click on it if you would like to change the item using the Properties dialog.

7.1.4.2. Categories

You can access the Category manager by clicking on the modify button at the end of the Categories row. You can create & remove categories here and you can set which category (or more categories) should contain the selected item.



- **Name**
  Here you can see the name of the item whose categories are actually edited.

- **List of available categories**
  The list of available categories shows all the categories that has been previously created. If you wish to create a new category, just click into the field and start typing.

- **Add category to this item**
  Click on the „+" button to add the selected (or typed) category to the actual item. This option is available only when you wish to edit an item which is not part of the factory defaults.

- **Delete this item from the selected category**
  Click on the "-"button to remove a selected category from the added categories list below. It is only possible if there is a category selected, and there is not only one in the list.

- **This item is included in the following categories**

In this list you can see all the categories that are already added to the selected item. The list cannot be empty, there must be at least one category added.

7.2. Features of the Design Center

7.2.1. Category based content handling

One object can be in multiple categories, which makes handling flexible compared to the classic folder-based technology.

7.2.2. Search history

The software is continuously recording the results of searches, so you can revisit previous result by just one click.

7.2.3. Fast search engine

The search engine was developed for the software's special needs, thus it can provide quick & accurate results in seconds even in a large database of items.

7.2.4. Free word searching

Don't remember the full name of an item you used earlier? No problem! Just type any known part of the name, and the software will create a list of the possible items for you.

7.2.5. Unified interface for all item types

Whether you are working with doors, windows, objects, sets or even with groups and materials you can use the same convenient interface for all of them. You can use the flexibility of searching for all those item types.

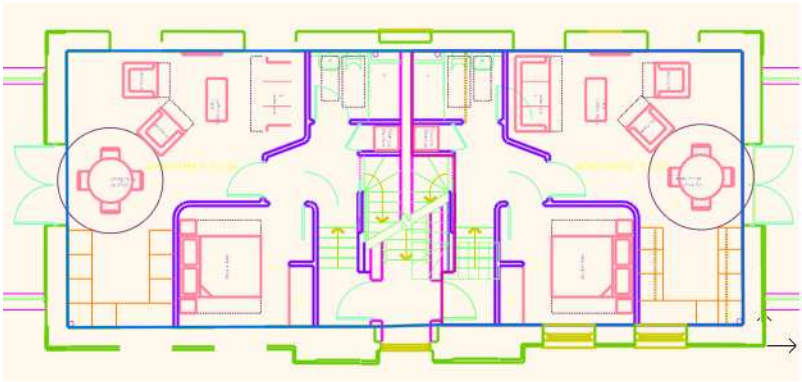
8. Wall - improved commands

8.1. Walls on DWG drawing

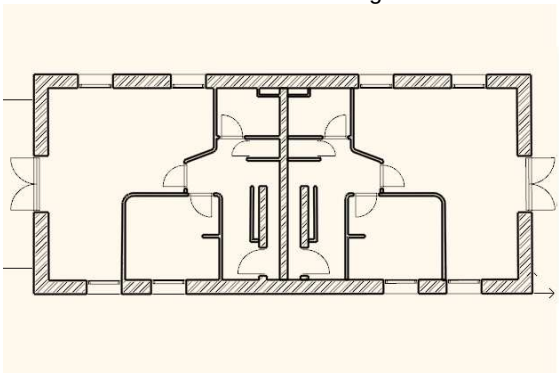
Use the Walls on DWG drawing to convert a 2D drawing into a 3D model, by using its lines.

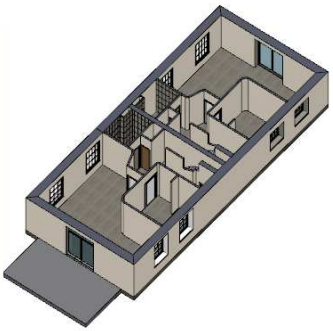
Example:

1. Imported DXG/DWG drawing



2. 2D lines converted into drawing & 3D model





How to use the tool

- Start the Walls on DWG drawing tool.
- Left click on a line near to its endpoint, which line represents one side of the wall.
- Left click on the same line, near to its other endpoint.

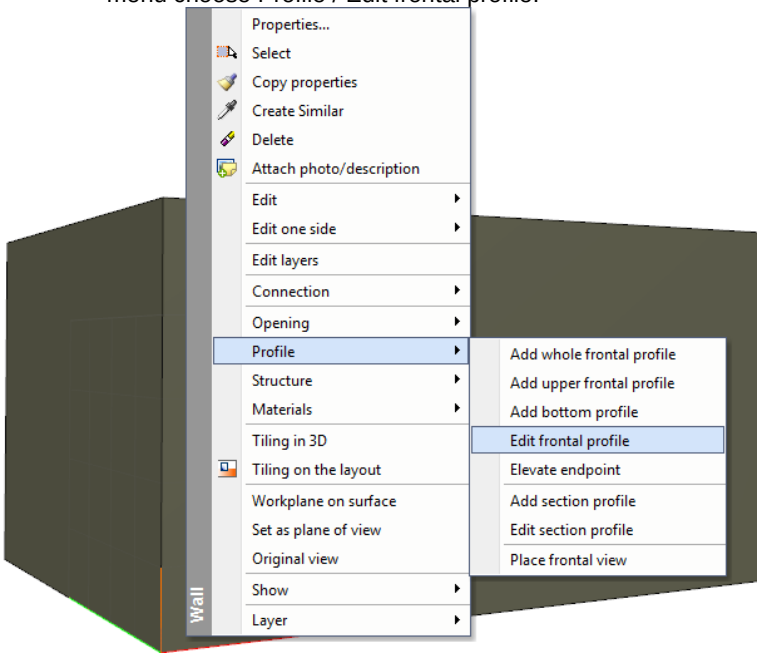
- Left click on the second line, which represents the thickness of the wall. When the tool is finished, you will see the wall item on the 2D and in 3D.

8.2. Edit frontal wall profile in 3D

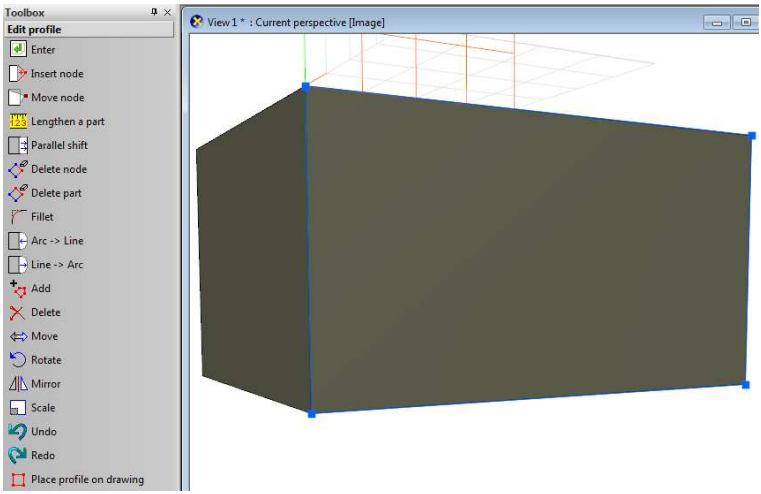
The Edit frontal profile of the wall in 3D gives you the possibility to draft it not only on a 2D layout, but on the 3D surface of the model as well.

How to use the tool

- Right click on the wall surface in 3D and from the appearing pop menu choose Profile / Edit frontal profile.



- Use the Edit profile tools to change the shape of the wall surface as you wish.



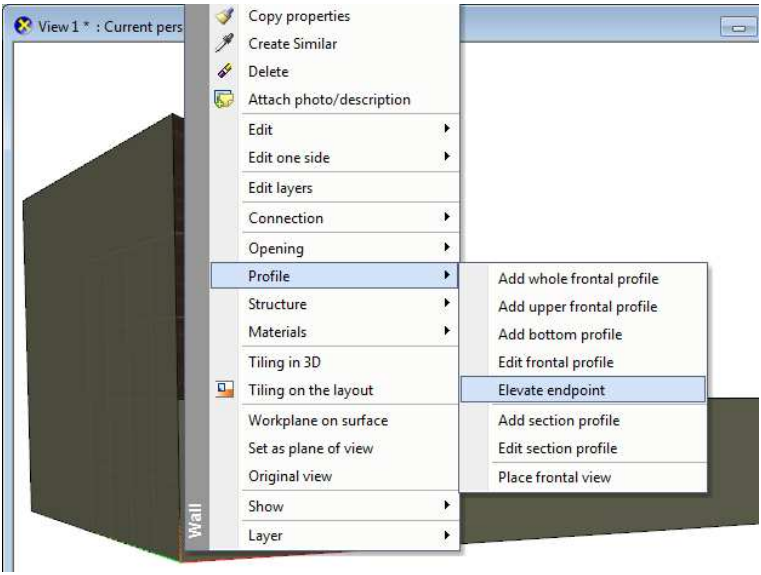
- Hit ENTER to finish the tool.

8.3. Elevate wall endpoint in 3D

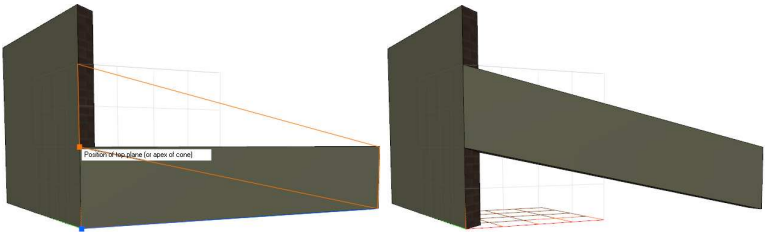
By using the Elevate endpoint tool in the 3D window you can graphically set the wall endpoint's accurate position by elevating it.

How to use the tool

- Right click near to the wall endpoint in 3D and from the appearing pop menu choose Profile / Elevate endpoint.



- Set the elevation graphically and left click or type a distance and hit ENTER.



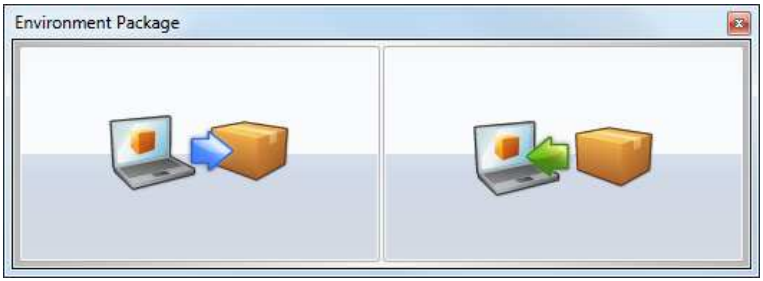
9. Environment Package

The Environment Package allows you to move sets and settings, materials, objects, and many more between multiple computers to use the same environment everywhere.

Just follow the typical configuration of packing and move in, or select Custom settings and adjust the contents of the package based on the actual needs.
Using Environment Package

9.1. Create package

The Environment Package feature can be started from the File menu / Preferences / Environment Package.

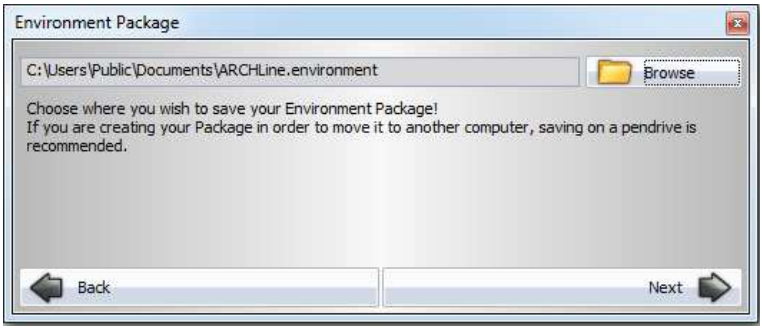


9.1.1. Create package – Typical settings

You can pack the environment components into a single package and move to another machine. You can unpack the environment file on the second computer to have the same settings on it.

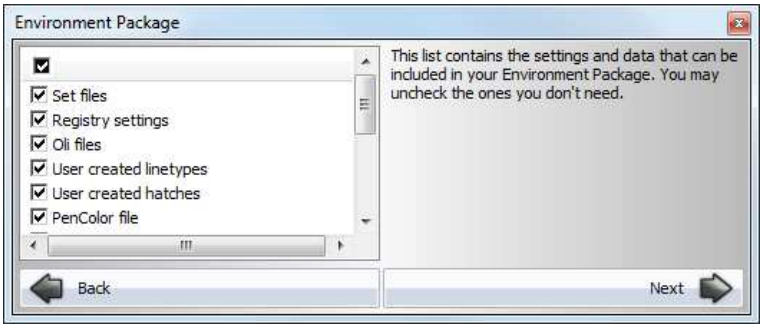
When you click on the Create package button the following dialog will appear where you have to options to create an environment package file: Typical & Custom.

When you choose typical the command collects all components and packages it into one file. This setting is the recommended for most of the users. Click on the next button to step to the next page, where you can define the path for the created file.



9.1.2. Create package – Custom settings

When you choose Custom you can select the components to compress into the package. This option is recommended for those advanced users who are experienced in ARCHLine.XP settings and want to customize the package content.



You can tick the option next to the files and settings which you would like to copy into the environment file. The following list is for your information to help choosing from the options.

Set files

If you enable the Set files option, the software will make a copy of the template file into the environment package.

Registry settings

If you enable the Registry settings option, the software will make a copy of the user settings stored in the Windows registry, into the environment package.

Oli files

If you enable the Oli files option, the software will make a copy of the user created OLI files into the environment package. Oli files can be created multiple ways by the users (directly and indirectly), for example by downloading objects from Google 3D Warehouse.

User created line types

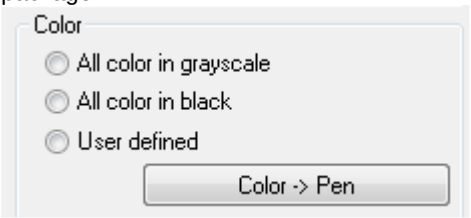
If you enable the **User created line types** option, the software will make a copy of the user created line types into the environment package.

User created hatches

If you enable the **User created line hatches** option, the software will make a copy of the user created hatches into the environment package.

PenColor file

If you enable the **PenColor file** option, the software will make a copy of the ARCHLine.XP Color – plotter pen assignment file into the environment package.



User created materials

If you enable the **User created materials** option, the software will make a copy of the **User created materials** into the environment package.

XML files

If you enable the **XML files** option, the software will make a copy of the **XML files** saved in the \ProgramData\Cadline\ARCHlineXP2011\Support folder into the environment package.

Cabinet configuration files

If you enable this option, the software will make a copy of the locally created cabinet configurations into the environment package file. These configuration files help you edit the cabinets by their original detailed settings, not only as an object.

Command aliases

If you enable this option, the software will make a copy of the locally modified ARCHLine.PGP alias configuration file.

City images/locations

If you enable this option, the software will make a copy of the city images and locations that you can change in the Sun settings dialog.

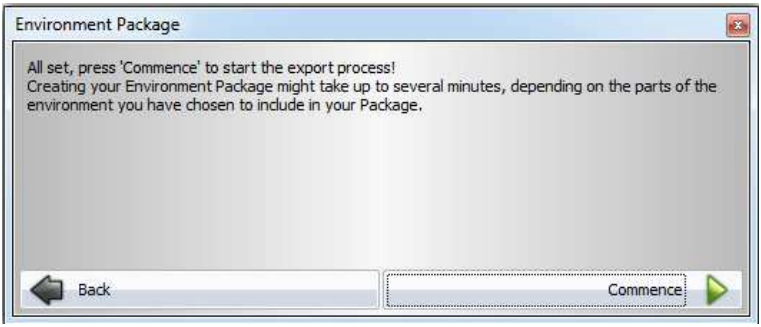
User created light types

If you enable this option, the software will make a copy of the user created light. A user light can be created in the Light manager.

User created toolbars

If you enable this option, the software will make a copy of the user created toolbars. User created toolbars can be made by the Tools / Customize / Toolbars command.

If you tick an option off in the list, the corresponding setting or file won't be compressed into the environment file. When finished, please press the Next button. The program collects the necessary data and shows the following page.



Press Commence and the software starts to create the environment package file. This can take long depending on the settings you enabled and the speed of the computer.

While processing you will see the Please wait… text at the right bottom corner of the dialog. Please be patient until the final page appears.

Click on Show in directory to open the folder of the finished environment package in Windows Explorer.

Click on the Information button to open the environment package information screen.

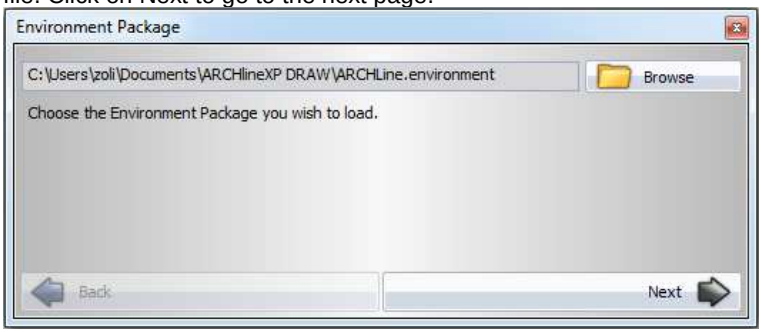
Click on Done, to close the Environment Package dialog.

9.2. Unpacking

9.2.1. Unpacking – Typical settings

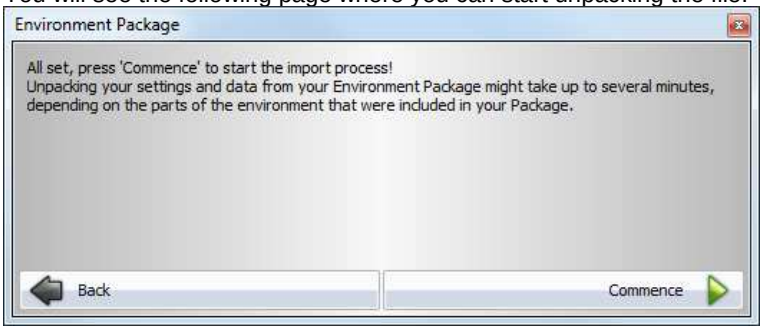
You can unpack the content of a previously assembled single environment package into another computer.

Click on the Browse button to find and open the environment package file. After opening it, you will see the name and path of the selected environment file. Click on Next to go to the next page.



In the following page you can choose from the typical and custom settings to unpack the environment package. Click on Typical to unpack all the content from the package to this computer.

You will see the following page where you can start unpacking the file.



Click on Commence to start the process and unpack all the settings and files that can be found in the environment package.

While processing you will see the Please wait… text at the right bottom corner of the dialog. Please be patient until the final page appears.

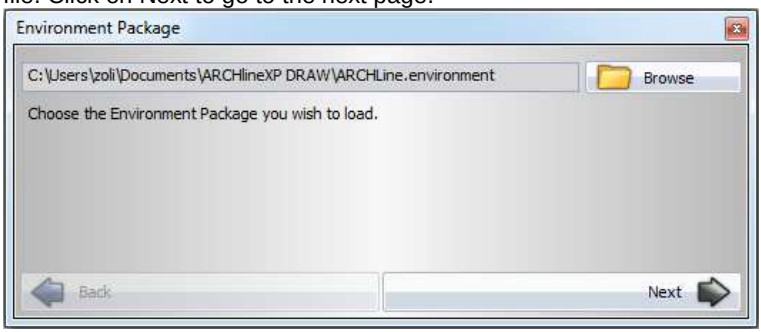
You can close the dialog by clicking on the Restart ARCHLine.XP button which reminds you that after closing the dialog you should restart the software, before working with the new settings.

Please do not forget to restart ARCHLine.XP after closing the wizard! It can lead to serious errors if you do not restart the software after unpacking the environment file!

9.2.2. Unpacking – Custom settings

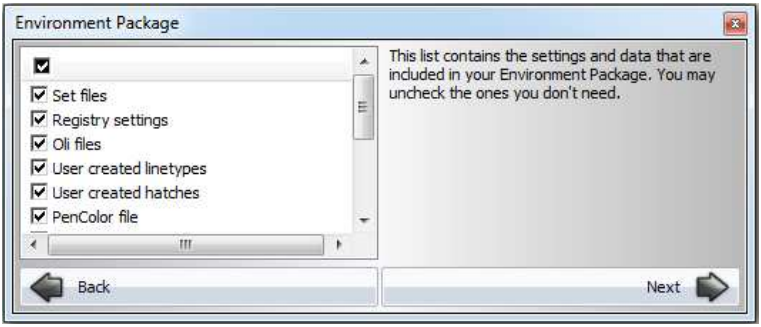
You can unpack the content of a previously assembled single environment package into another computer.

Click on the Browse button to find and open the environment package file. After opening it, you will see the name and path of the selected environment file. Click on Next to go to the next page.



In the following page you can choose from the typical and custom settings to unpack the environment package. Click on Custom to control which part of the content you would like to unpack from the package to this computer. This feature is recommended only for advanced users.

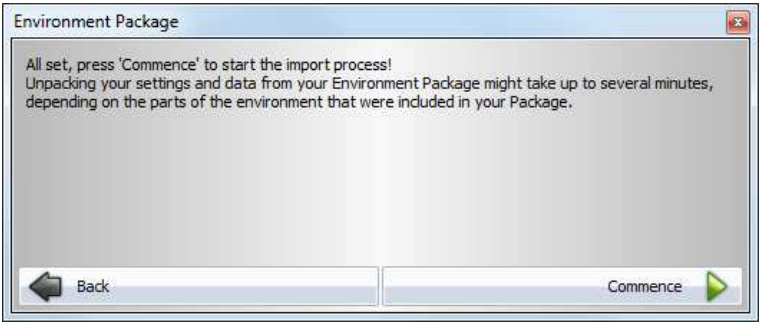
When you choose Custom you can select the components to extract from the package.



On the left side of the dialog you can find the settings that are compressed into the package file. If you do not see an expected option, it means that you might forget to pack it into the file when the package was created.

If you would like to learn more about the options in the Custom settings please read through the corresponding part in chapter Create package – Custom.

Click on Next to step to the following page.



Please press Commence to start the package import.

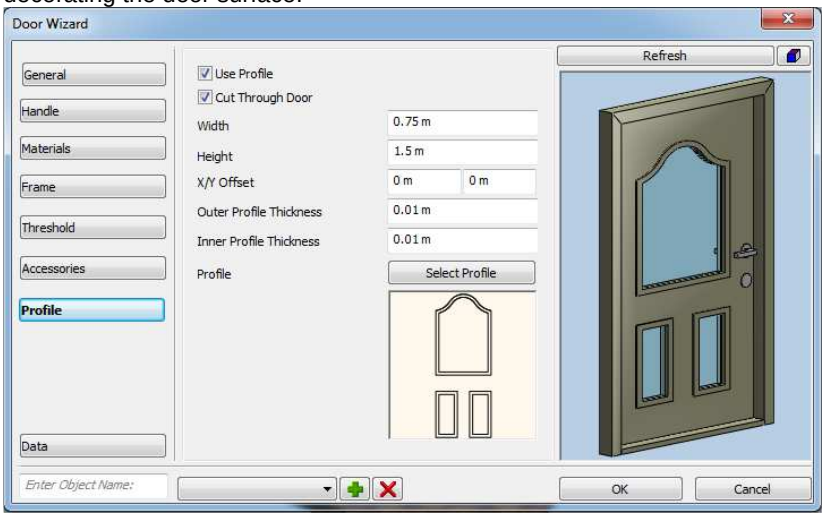
While processing you will see the Please wait… text at the right bottom corner of the dialog. Please be patient until the final page appears.

You can close the dialog by clicking on the Restart ARCHLine.XP button which reminds you that after closing the dialog you should restart the software, before working with the new settings.

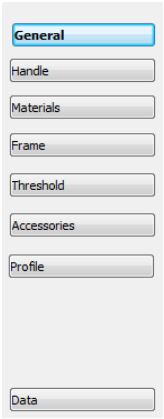
Please do not forget to restart ARCHLine.XP after closing the wizard! It can lead to serious errors if you do not restart the software after unpacking the environment file!

10. Door Wizard

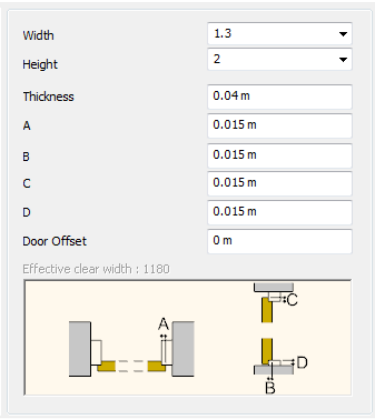
Using the door wizard you can design complex door structures in a few steps. This tool is designed to offer simple and easy to use options and possibilities to create a new hinged door. It is possible only by setting the main properties such as the Handles, Materials (even photos of the original door), framing with profile, threshold with profile, additional object Accessories and Profile tool for decorating the door surface.



The structure of Door Wizard contains different parts: the left side Control bar, the middle Properties panel, the right side 3D preview, and the bottom Controllers pane.



Control bar



Properties

3D preview

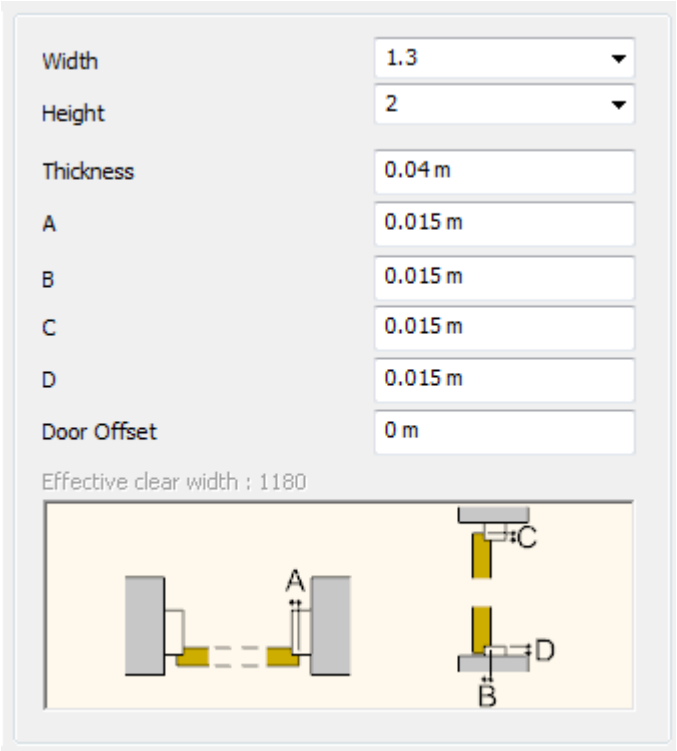
Controllers

10.1. How to use the Door Wizard

Open the Door Wizard and edit the properties. When a value is changed, you can build it in 3D by pressing the Refresh button at the top of the 3D Preview. When you finished with the settings, you can type the name of the new door at the left side of the Control bar pane and press the OK button to save the new door type and place it on a wall right away.

10.2. General properties

In the **General properties** panel of the Door Wizard you can find the general door geometry settings.



Width

The width value defines the door width, including the frame.

Height

The height value defines the door height, including the frame.

Thickness

The thickness value defines the door panel thickness, without decorations and handles.

„A”

The value “A” is to set the overlapping of the door panel sides on the door framing.

„B”

The value “B” is to set the thickness of the door panel part which remains inside the effective clear width.

„C”

The value “C” is to set the overlapping of the door panel top on the door framing.

„D”

The value “D” is to set the overlapping of the door panel bottom on the door threshold.

Door Offset

The Door Offset option is for setting up a distance between the door panel and the framing, if necessary. If the value is 0, then the door is perfectly aligned to the framing. If the value is different than 0 then the door panel will be shifted perpendicularly to the panel surface in a positive or negative direction, depending on the sign of the value.

Effective clear width

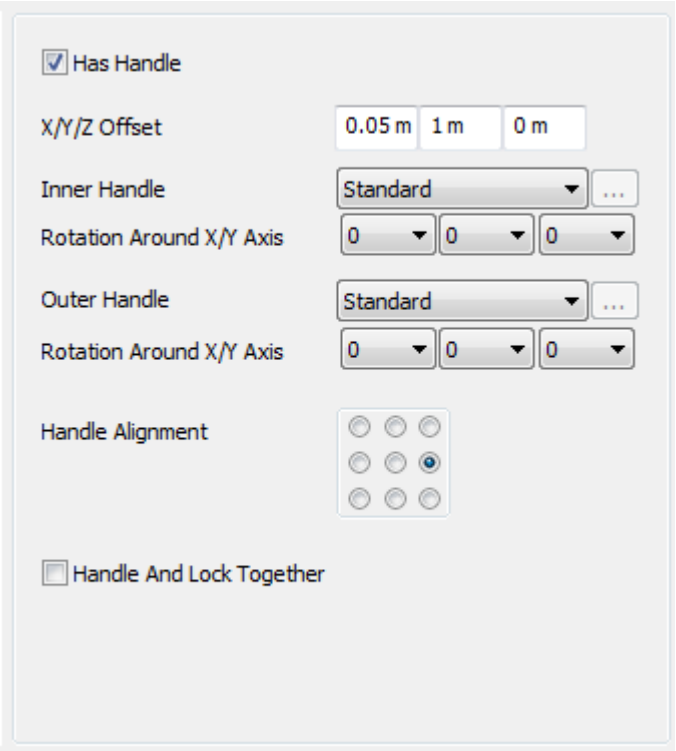
The Effective clear width value shows the distance between the two side frame profiles. This information value helps designing the clear width of the door.

Figure panel

The figure panel shows an explanatory drawing of the different values of the General door properties. This drawing acts like a real drawing in ARCHLine.XP, so you can zoom it and pan it to check the details.

10.3. Handle properties

In the **Handle properties** panel you find the geometry settings for the door handles and knobs.



Has Handle

The Has Handle option enables the handles and locks for the door panel. Enable this option if you would like to define handles and locks.

X/Y/Z Offset

The X/Y/Z Offset values of the door Handle properties let you to define a free offset of the selected handles in every direction. The left bottom alignment point is the origin (0, 0, 0). The three values are the X, Y, and Z directions.

Inner Handle

The Inner Handle list allows you to select a handle for the inner side of the door and also to choose any object you can access with the Design Center. Click on the combo box to open the dropdown list and choose Standard, Circle Shaped, Sphere Shaped or Custom. Each choice will define a different door handle with lock.

To define an object for the door handle, select Custom from the list, and click on the Browse button.  When you do so, the Insert objects dialog will appear, in which you can use the Object Selection button to browse a new object.

Rotation around X/Y Axis

You can rotate the selected handle by changing the values of the Rotation around X/Y/Z Axis. The default is 0, 0, 0 and the unit is degrees. Select the desired angle to rotate the handle by a specific angle.

Outer Handle

The Outer Handle list allows you to select a handle for the outer side of the door and also to choose any object you can access with the Design Center. Click on the combo box to open the dropdown list and choose Standard, Circle Shaped, Sphere Shaped or Custom. Each choice will define a different door handle with lock.

To define an object for the door handle, select Custom from the list, and click on the Browse button.  When you do so, the Insert objects dialog will appear, in which you can use the Object Selection button to browse a new object.

Rotation around X/Y Axis

You can rotate the selected handle by changing the values of the Rotation around X/Y/Z Axis. The default is 0, 0, 0 and the unit is degrees. Select the desired angle to rotate the handle by a specific angle.

Handle Alignment

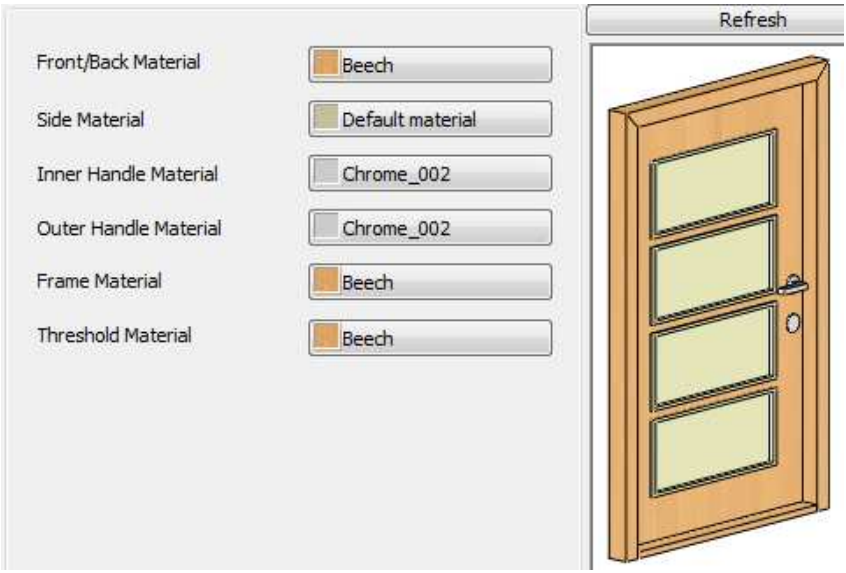
Use the Handle Alignment matrix to define the position of the handle on the door panel. You can refine the alignment by using the X/Y/Z Offset.

Handle and Lock Together

The Handle and Lock Together option will weld the handle and lock object into one object if Standard, Circle Shaped or Sphere Shaped handle was selected. If Custom handle is selected, the Handle and Lock Together option won't change anything.

10.4. Materials properties

In the **Materials property** panel you can set the materials for each specified part of the door.



Front/Back Material

The Front/Back Material button allows you to define the front side and back side material of the door panel. Click on the material button to add a material using the Material manager.

Side Material

The Side Material button allows you to define the side material of the door panel. Click on the material button to add a material using the Material manager.

Inner Handle Material

The Inner Handle Material button allows you to define the inner handle material of the door panel. Click on the material button to add a material using the Material manager. If the door handle is Custom, you can change the door handle material by editing the Custom object in the Handle properties panel.

Outer Handle Material

The Outer Handle Material button allows you to define the outer handle material of the door panel. Click on the material button to add a material using the Material manager. If the door handle is Custom, you can change the door handle material by editing the Custom object in the Handle properties panel.

Frame Material

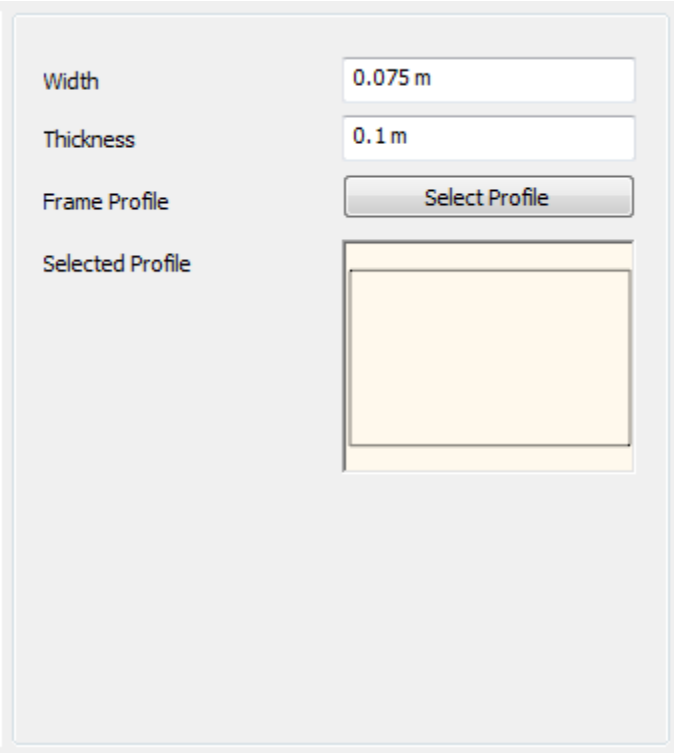
The Frame Material button allows you to define the frame material of the door panel. Click on the material button to add a material using the Material manager.

Threshold Material

The Threshold Material button allows you to define the Threshold material of the door panel. Click on the material button to add a material using the Material manager.

10.5. Frame properties

In the **Frame properties** panel you can find the geometry settings for the door frame.



Width

The Width **value** in the Frame properties panel defines the width of the chosen profile. This value overrides the corresponding profile settings.

Thickness

The Thickness value in the Frame properties panel defines the thickness of the chosen profile. This value overrides the corresponding profile settings.

Frame Profile – Select Profile

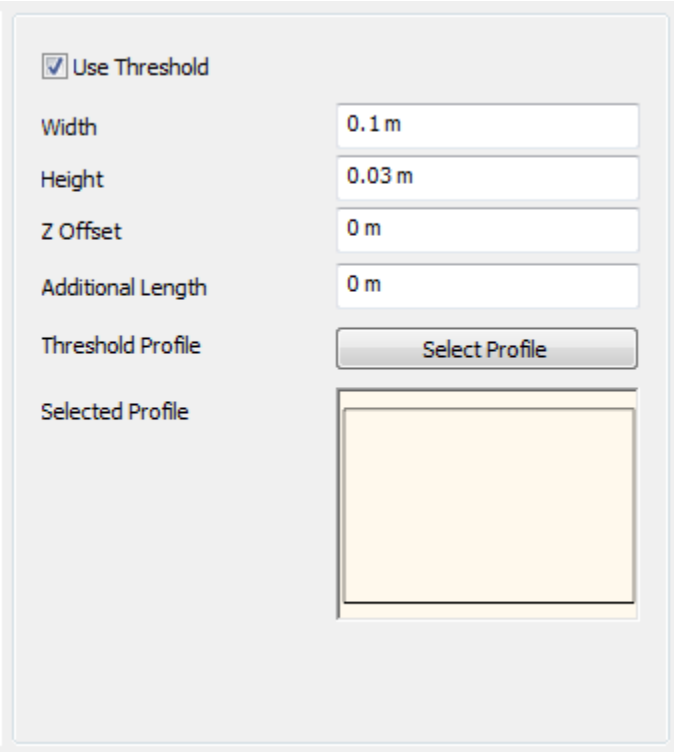
The Frame Profile – Select Profile button allows you to choose a cross-section profile from the Profiles library for the door frame. Click on the Select Profile button to browse a cross section profile.

Selected Profile

The Selected Profile preview shows the current profile.

10.6. Threshold

In the **Threshold properties** panel you can find the geometry settings for the door threshold.



Use Threshold

Enable Use Threshold option to visualize the door threshold. After enabling this option you can change the settings on the Threshold page. If the option is disabled there will be no door threshold, and you cannot modify the settings on the page.

Width

The Width value in the Frame properties panel defines the width of the chosen profile. This value overrides the corresponding profile settings.

Height

The Height value in the Frame properties panel defines the height of the chosen profile. This value overrides the corresponding profile settings.

Z Offset

The Z Offset value changes the vertical position of the threshold. When Z Offset is set to 0 (zero) then the threshold has no offset, it is aligned to the

bottom of the door. If you use a positive or negative value, you can elevate the threshold vertically up and down.

Additional Length

The Additional length extends the original length of the threshold.

Threshold Profile – Select Profile

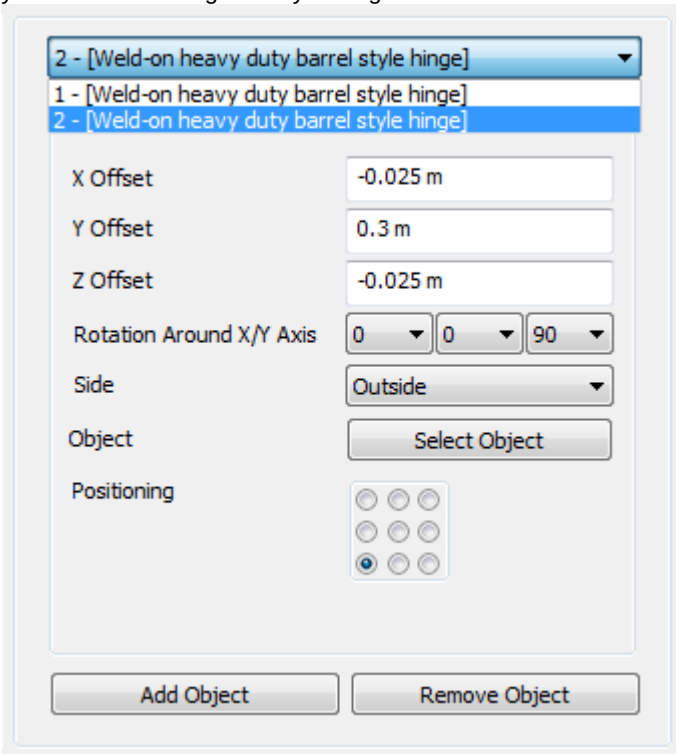
The Threshold Profile – Select Profile button allows you to choose a cross-section profile from the Profiles library for the door threshold. Click on the Select Profile button to browse a cross section profile.

Selected Profile

The Selected Profile preview shows the current profile.

10.7. Accessories

In the **Accessories property** panel you can add accessories to the door and you can define the geometry settings of the accessories.



10.7.1. Accessories list

The Accessories list shows list of added objects and lets you select one to edit. If there is no object added yet, this list is not visible.

X Offset

Change the X Offset value to displace the current accessory to the left or right direction.

Y Offset

Change the Y Offset value to elevate the current accessory up or down.

Z Offset

Change the Z Offset value to displace the current accessory perpendicular to the door surface. 0 (zero) means that the object is on the surface.

Rotation around X/Y/Z Axis

Change the Rotation around X/Y/Z Axis values to rotate the current accessory. 0 (zero) is the default position. The values are the X/Y/Z rotation angles in this order.

Side

The Side list has two options to define the placement side for the actual accessory.

Object – Select Object

The Select Object button opens the Insert objects dialog. You can browse for an object to set it as an accessory element for the current door.

Positioning

The Accessories Positioning grid helps you to set the alignment point of the actual accessory. Tick the desired radio button to set the accessory position to one of the alignment points.

Add Object

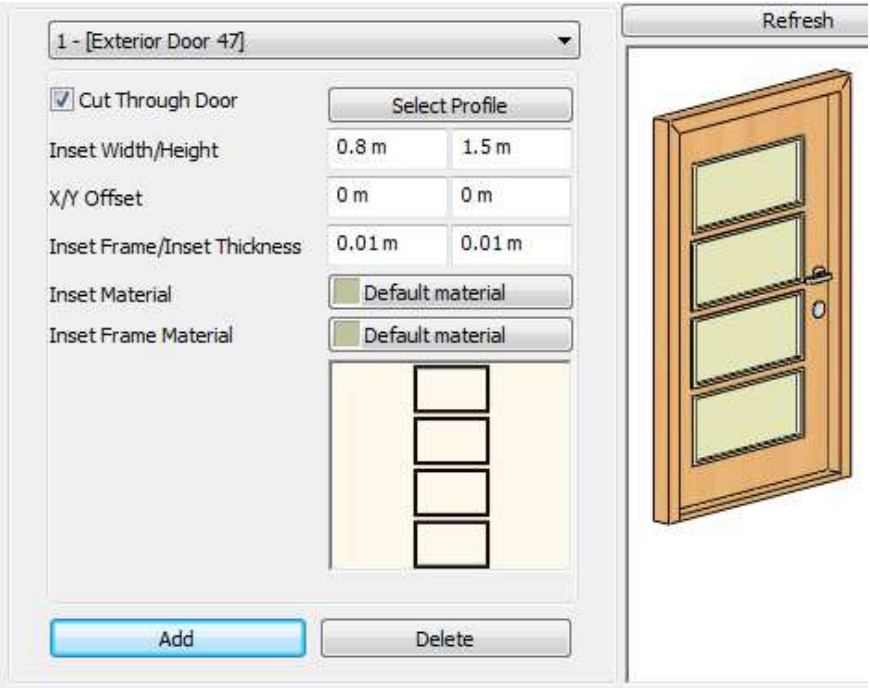
Use the Add Object button to add a new accessory. By pressing the Add Object button, the Insert object dialog window will open, to let you browse any object. When an object is selected, you will return to the Door wizard Accessories page and you can set the properties of the accessory. The selected object name will be visible at the top of the page in the Accessories list with a numbering.

Remove Object

Use the Remove object to remove the current accessory object. Note that this operation cannot be undone. If you accidentally remove an accessory object, you might need to browse it again.

10.8. Door Profile

In the D**oor Profile properties** panel you can find the geometry settings for the door Inset.



Add

Use the Add button to define a door inset. You can add more insets for one door. The current inset is listed on the top with an increasing number.

Delete

Use the Delete button to delete the current door inset.

Cut through Door

The Cut through door option will cut the selected profile into the door surface. If you enable this option the profile will be cut into the door surface. This way you can create simple glazing or bevels. If you disable this option, the selected profile will be added as a positive extrusion to the door surface. This way you can create panels on the door surface.

Inset Width/Height

The Width value in the Profile properties panel defines the inset width. This value overrides the corresponding profile settings. The Height value in the Profile properties panel defines the inset height. This value overrides the corresponding profile settings.

X/Y Offset

The X/Y Offset values help you to displace the selected inset on the door surface. Change the X value to set a left/right displacement. Change the Y value to set a vertical displacement. 0 (zero) means the profile is perfectly aligned to the geometrical centre of the door surface.

Inset Thickness

Inset Thickness value defines the panel thickness. If you have selected a so called “profile with islands” which means the profile has an outer contour and there are other closed contours in it, then it defines the thickness of inner profiles.

Inset Frame Thickness

Inset Frame Thickness value defines the frame thickness. This means that by choosing a complex profile, you can define the Inset and Inset Frame as well. The first level is Inset Frame, and the second level is the Inset, the inner contour. If you have selected a simple profile without islands in it, then this value has no effect.

Profile – Select Profile

Click on the Select Profile button to browse a profile from the Profiles library.

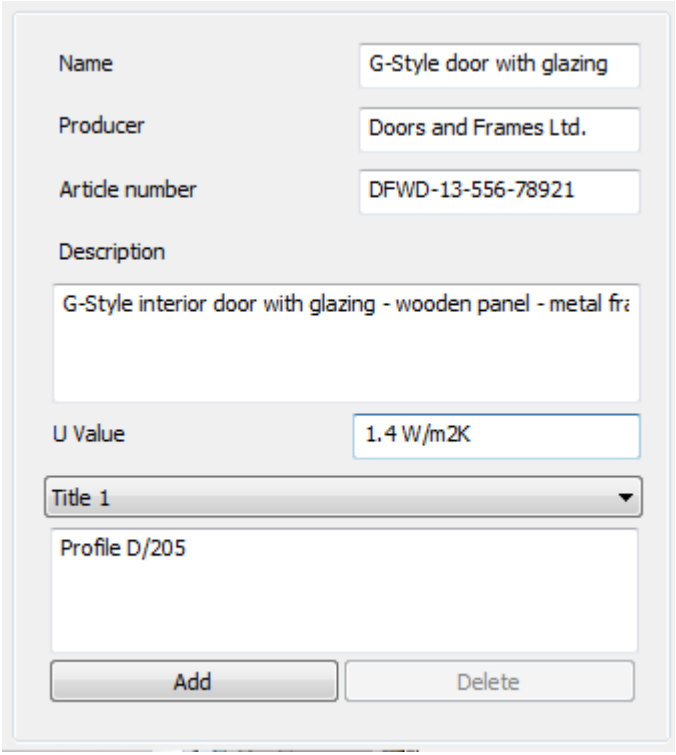
Inset Frame Material

The Inset Frame Material button allows you to define Inset Frame material. Click on the material button to add a material using the Material manager.

Inset Material

The Inset Material button allows you to define the Inset material. Click on the material button to add a material using the Material manager.

10.9. Data



Name

Use the Name field on the Data page of the Door wizard to type a unique name for the newly created door.

Producer

Use the Producer field on the Data page of the Door wizard to define a producer.

Article number

Use the Article number field on the Data page of the Door wizard to type an article number or bar code.

Description

Use the Description field on the Data page of the Door wizard to type a short description text.

U-Value

Use the U-value to define the door's U-value for possible energy calculations.

Add

Use the Add button to define additional information. You can add more titles for one door. The current title is listed on the top with an increasing number.

Delete

Use the Delete button to delete the current additional information.

10.10. 3D Preview

On the right side of the Door wizard dialog you can find the 3D preview panel. Use this panel and its controllers to examine the changes during the design process in the wizard.

Refresh button

On the top of the 3D preview panel you can find the Refresh button. This can be used to refresh the 3D preview content after changing values in the Door Wizard. When you press the Refresh button, the software will update the door preview by using the current values.

View mode button

The View mode button can be used to switch between Wireframe, Hidden lines and textured views. Click on the button to switch to the next view. When you reach the last view, click on it again to set the first visual style again. On slower machines, this button can be used to turn off the 3D preview also, by setting the “X” state on it.

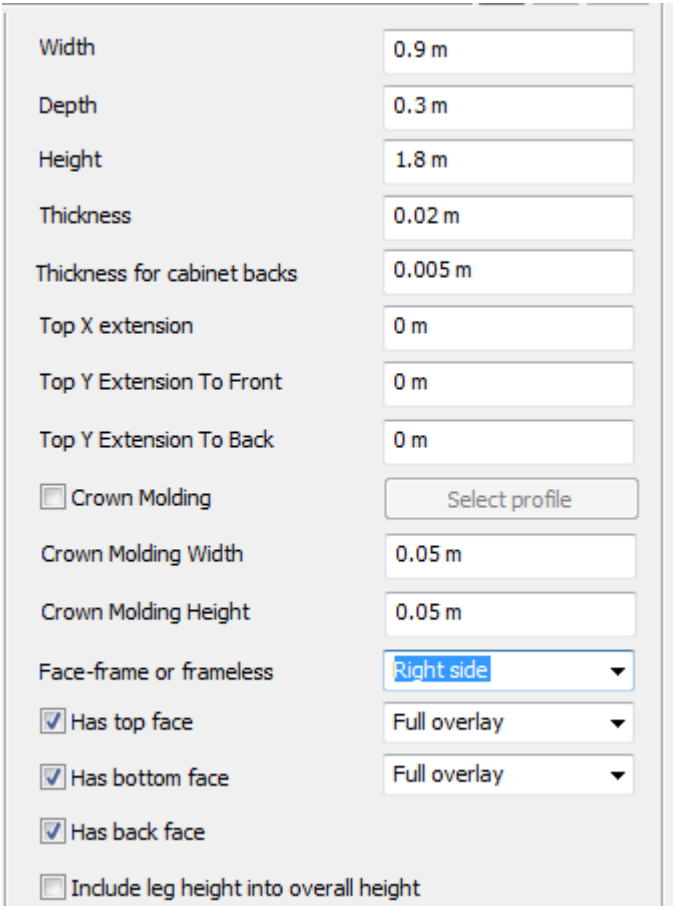
3D Preview area

The 3D preview area is the largest part of the 3D preview panel on the Door wizard dialog. Click and hold your left mouse button and move your mouse to rotate the preview content. Use the scroll-wheel of the mouse to zoom in or out and pan the 3D preview content.

11. Cabinet wizard

Using the cabinet wizard you can design complex cabinets for kitchen or living room or for other purpose in a few steps. This tool is designed to offer simple and easy to use options to create a new cabinet. It is possible only by setting the main properties such as the Shelves, Doors, Legs, Drawers, and Handles, Materials (even photos of the original door), additional object Accessories and Data tool to build up the cabinet.

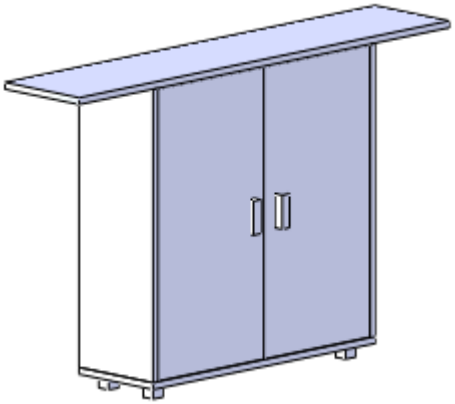
11.1. General page



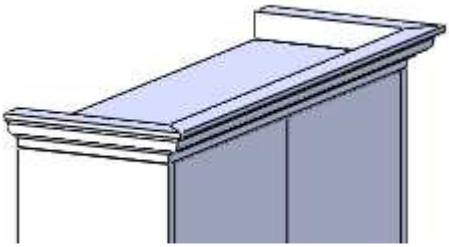
The cabinet box is defined by its width depth and height. The box-like component is fitted with drawers, shelves, legs, doors in cabinet construction.
The structure of cabinet wizard enables to define various types of enclosed furniture such as desks, bookcases, sideboards, etc.

The cabinet box is mostly made from plywood or particle board and you can define its thickness in the Thickness field. Typical cabinet box thickness varies from 3⁄8 inch (9.5 mm) to 3⁄4 inch (19 mm).
You can define separately the thickness for cabinet backs.

The Top X Extension, Top Y Extension to Front, Top Y Extension to back value lets you extend the top panel over the cabinet box.



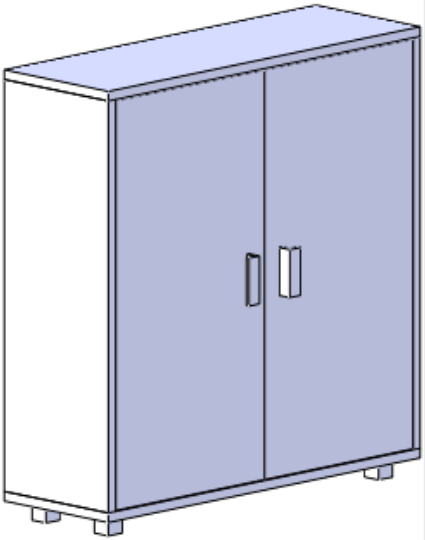
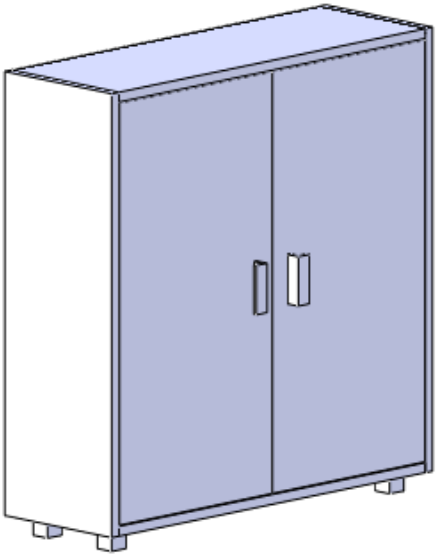
Crown moulding is an attractive detail to the cabinet box top edge. You can choose here Profile from the profile library or you can design your own profile and select it later. The **Crown moulding width** and **height** defines the enclosing box of the profile as cross section.



Cabinets may be either face-frame or frameless in construction. You can set it with the Has top face, Has bottom face and Has back face checkboxes.

Cabinet wizard allows you to choose between two cabinet box mounting options.

Full overlay means the side face is enclosed by top and bottom frame.
Traditional overlay means the top and bottom face is enclosed by side frame.

Full overlay	Traditional overlay
	

11.2. Materials page

Cabinet wizard allows you to assign materials to the following parts:

Cabinet solid material (general)

Top solid material

Bottom solid material

Shelf solid material

Door solid material

Plank solid material

Crown moulding material

Handle material

Support legs material

Door Front Material

Right Side Material

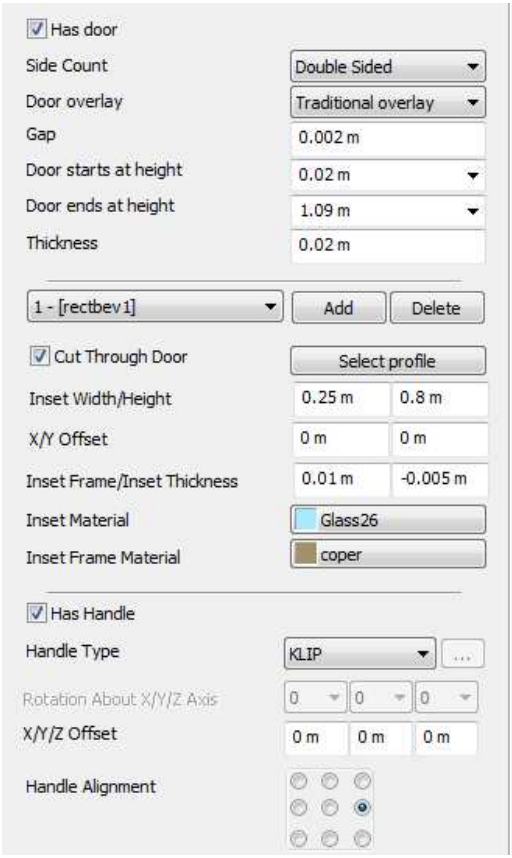
Left Side Material

Top Side Material

Bottom Side Material

Back Side Material

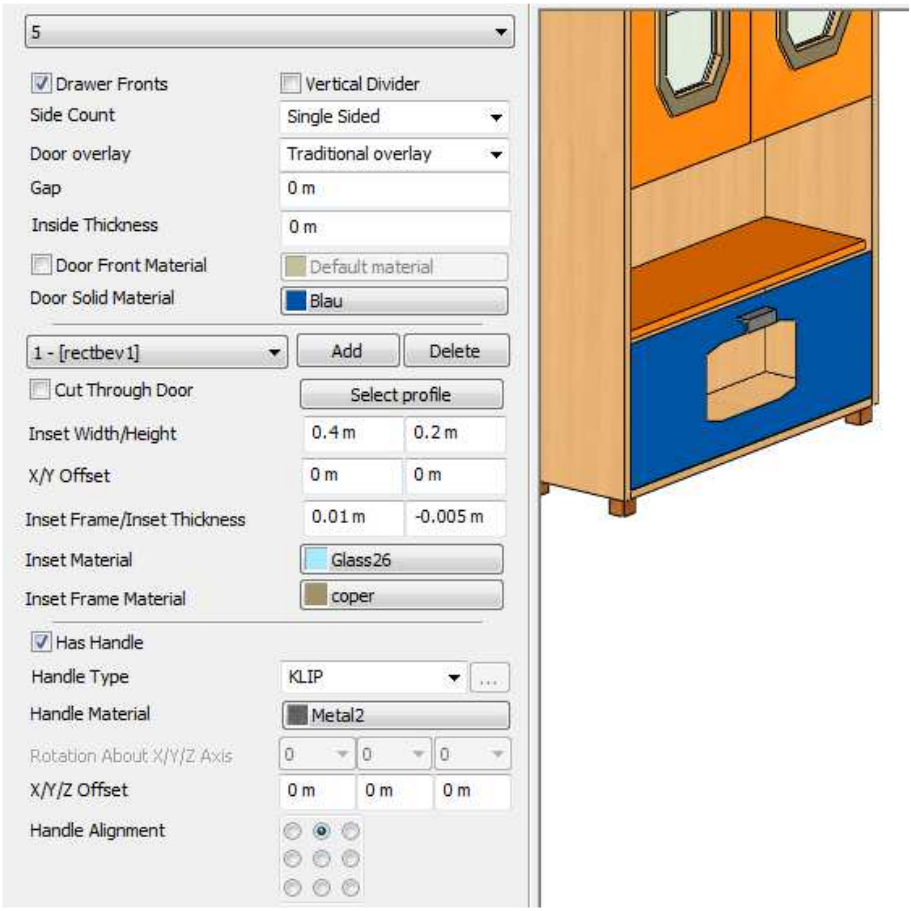
11.3. Doors page



Door properties are:

- Has door checkbox allows to add door
- Side Count can be: Single, Double, 3 and 4 sided
- Door overlay can be: Full or Traditional overlay
- Gap defines the gap between the door and the cabinet frame
- Door starts at height: door top elevation
- Door ends at height: door bottom elevation as height or shelf number
- Thickness: door thickness
- Inset definition: profile, enclosing box, offset, thickness, materials
- Handle: Type, Rotation, Offset, and Alignment

11.4. Drawers page

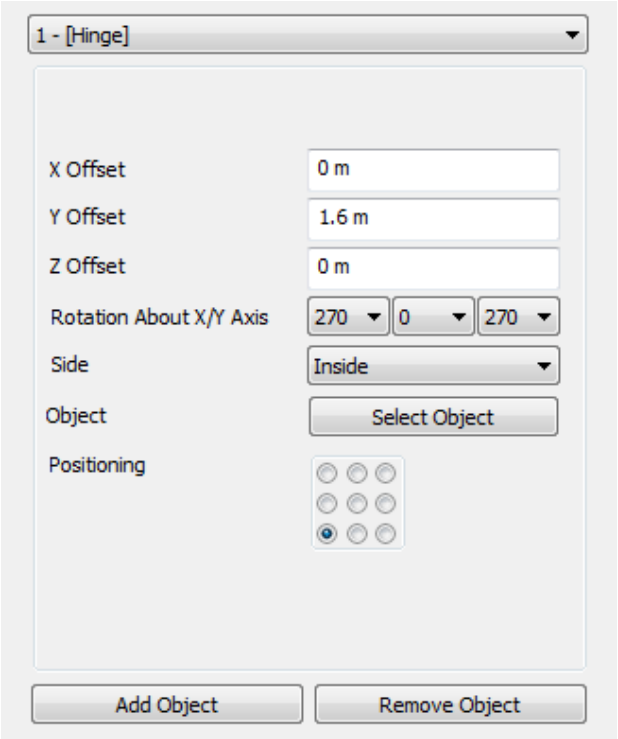


Drawer properties are:

- Vertical divider
- Side count
- Door Overlay
- Gap
- Inside Thickness
- Door Front Material
- Door Solid Material

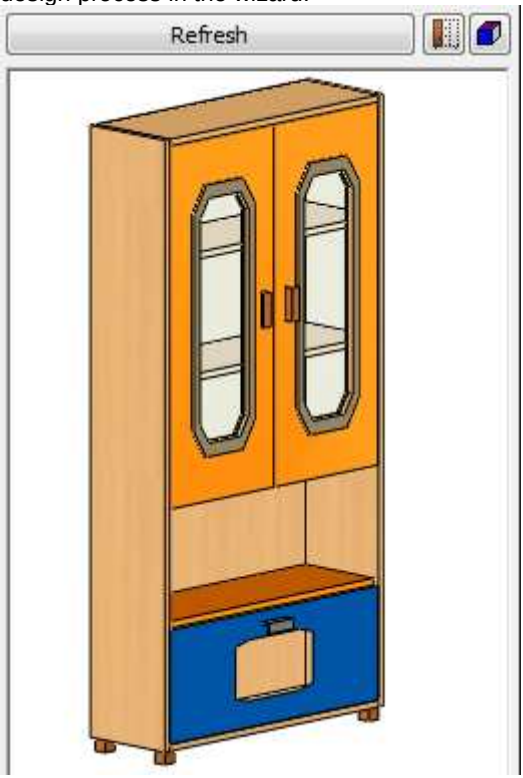
- Inset definition: profile, Cut Through Inset width/height, offset, thickness, materials
- Handle: Type, Rotation, Offset, and Alignment

11.5. Accessories page



11.6. 3D Preview

On the right side of the Cabinet wizard dialog you can find the 3D preview panel. Use this panel and its controllers to examine the changes during the design process in the wizard.



Refresh button

On the top of the 3D preview panel you can find the Refresh button. This can be used to refresh the 3D preview content after changing values in the Cabinet Wizard. When you press the Refresh button, the software will update the door preview by using the current values.

View mode button

The View mode button can be used to switch between Wireframe, Hidden lines and textured views. Click on the button to switch to the next view. When you reach the last view, click on it again to set the first visual style again. On

slower machines, this button can be used to turn off the 3D preview also, by setting the “X” state on it.

3D Preview area

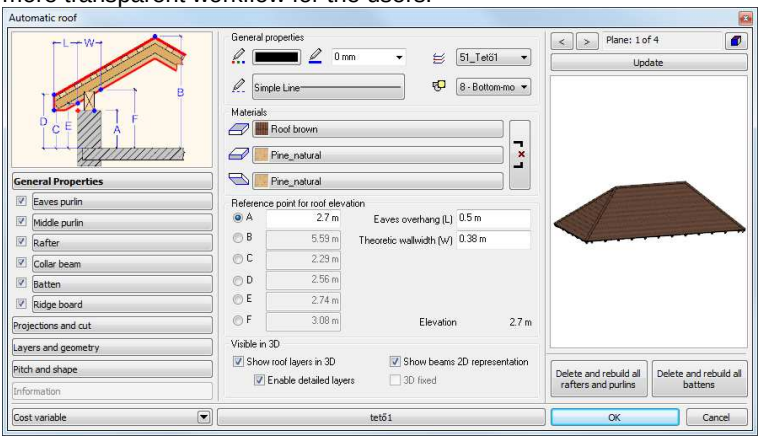
The 3D preview area is the largest part of the 3D preview panel on the Cabinet wizard dialog. Click and hold your left mouse button and move your mouse to rotate the preview content. Use the scroll-wheel of the mouse to zoom in or out and pan the 3D preview content.

12. Roof developments

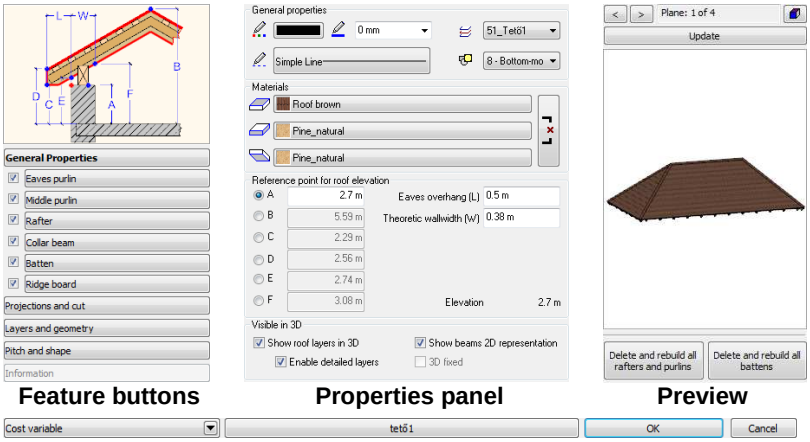
The Roof properties dialog has been developed to have a clearer and faster workflow with effective features.

12.1. Simple interface

The roof properties dialog has been designed to be transparent for the new users as well as the advanced ones. The new dialog allows an easier and more transparent workflow for the users.



The interface consists of the following main parts:



12.1.1. Parts of the Roof properties dialog

Feature buttons

You can find the Feature buttons at the left side of the Roof properties dialog. These buttons can be used to switch between main structural elements and properties of the roof. The schematic figure on top of the buttons will change according to the selection. (e.g.: when you select the Rafter button, you can see the rafter figure, explaining the values on the properties page.)

There is a very important special feature for these buttons. They have a checkbox to enable / disable a structural part of the roof.

Properties panel

In the middle of the Roof properties dialog, you can find the Properties panel, which shows the properties of the selected feature (Rafter, Batten, Projections and Cut, etc.).

Preview

You can find the Preview at the right side of the Roof properties dialog. Click on the Refresh button when you would like to see the changes that you made in the settings. You can also switch between roof planes, by using the “<” and the “>” buttons on top of the 3D preview. You can cycle through the model representations with the Presentation settings button.
Also, in some cases, when you need you can actually completely drop your changes for the rafters or battens if you use the Delete and rebuild all rafters and purlins and the Delete and rebuild all battens buttons.

Controls

You can add Cost parameters, save or open sets by using the buttons on the Controls bar. Use the OK button to accept the changes and close the dialog, or use Cancel if you would like to drop all changes you made after opening the Roof properties dialog.

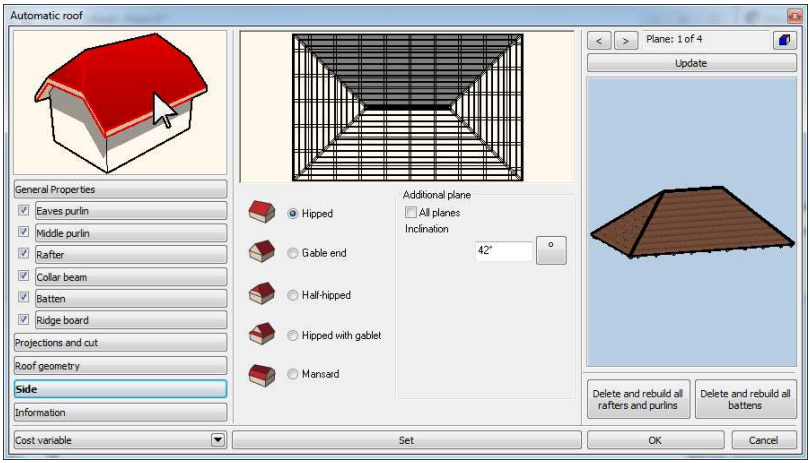
12.1.2. How to use the Roof properties dialog

When you work with the Roof properties dialog you should use the Feature buttons on the left hand side of the dialog to switch between main roof features and structural parts. You can use the checkboxes next to the Feature buttons to enable or disable a specific structural part.

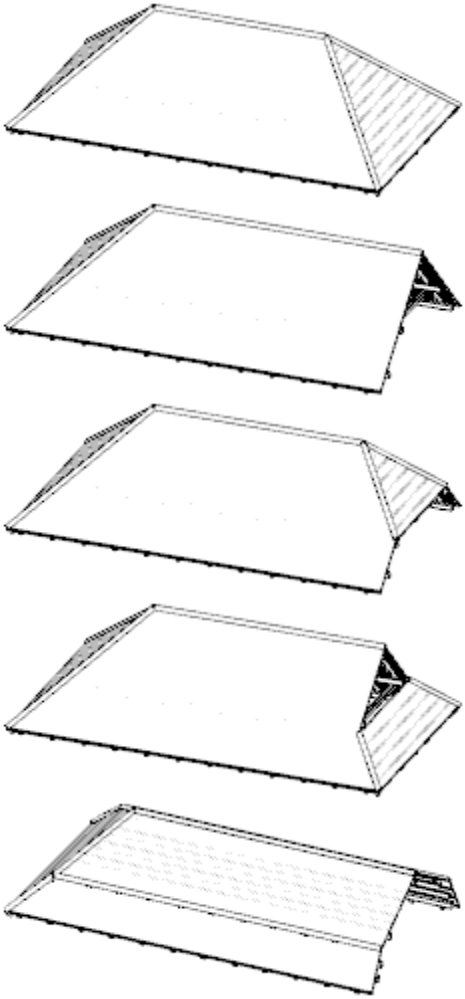
You can make changes on the Properties pages for each feature and after using the Refresh button at the right top corner of the dialog, you can update the changes to the 3D preview.

Finally you can use the Set button to store and/or recall sets to spare time. Use the OK button to accept the changes and close the dialog, or use Cancel if you would like to drop all changes you made after opening the Roof properties dialog.

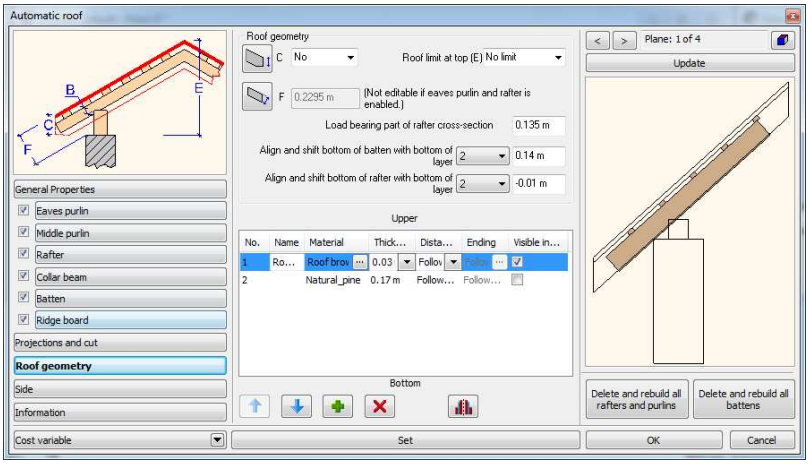
12.2. Easier roof-pitch management



Edit roof planes to create a roof of various pitch and shape:

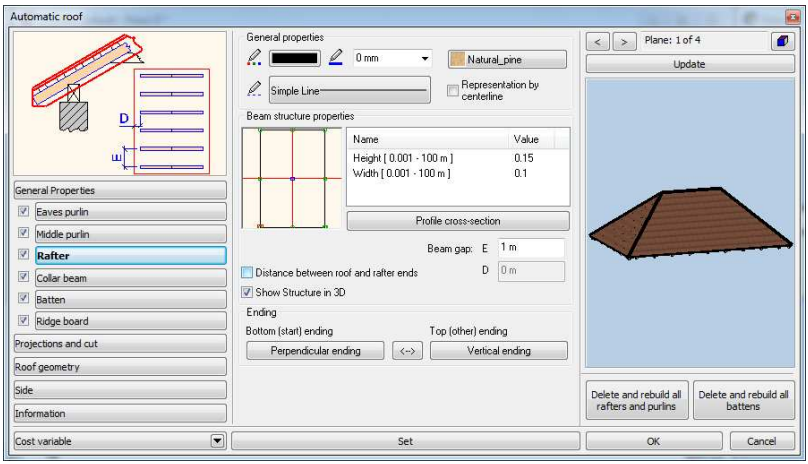

Hipped
Gable end
Half-hipped
Hipped with gablet
Mansard

12.3. Structure aligned to roof layers



12.4. Standardized cross-section definition

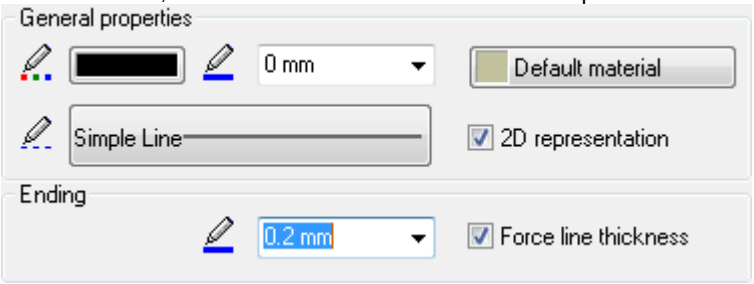
The cross-section definition of a structural element has been simplified to profile definition.

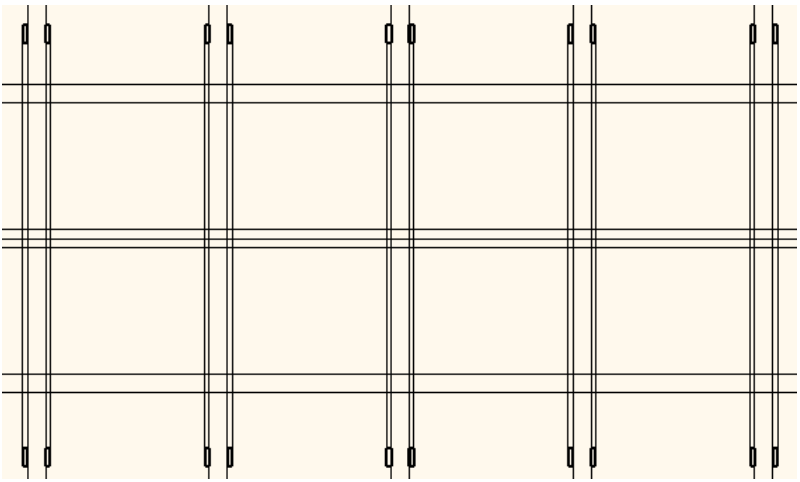


12.5. Collar and Tie

12.5.1. 2D representation

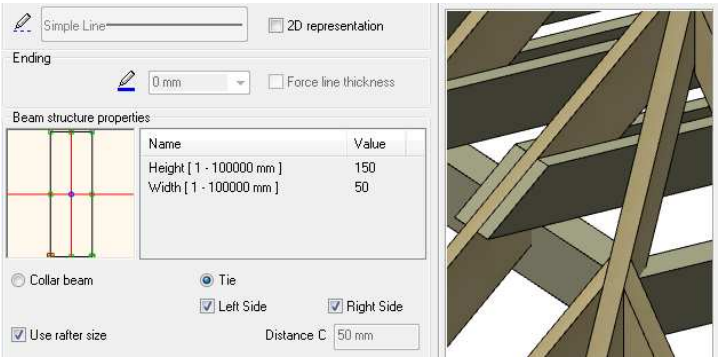
The collar and tie representation in is extended. According to some EU countries norm, the standard of these elements also represent distinct ending.





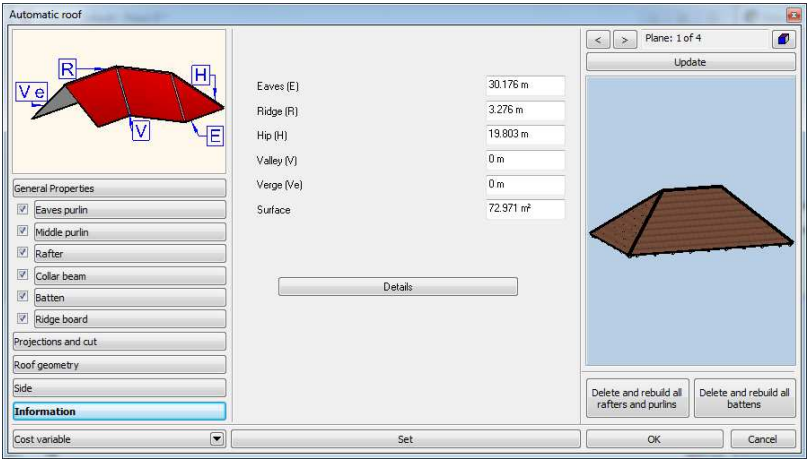
12.5.2. Roof tie: one-sided or duplex tie

The tie can be switched on and off side-by-side. This option lets you specify one-sided left, one-sided right ties or duplex tie as well.



12.5.3. Information

In the roof properties dialog there is a new Information button, which lets you see the main summarized quantities of the roof.



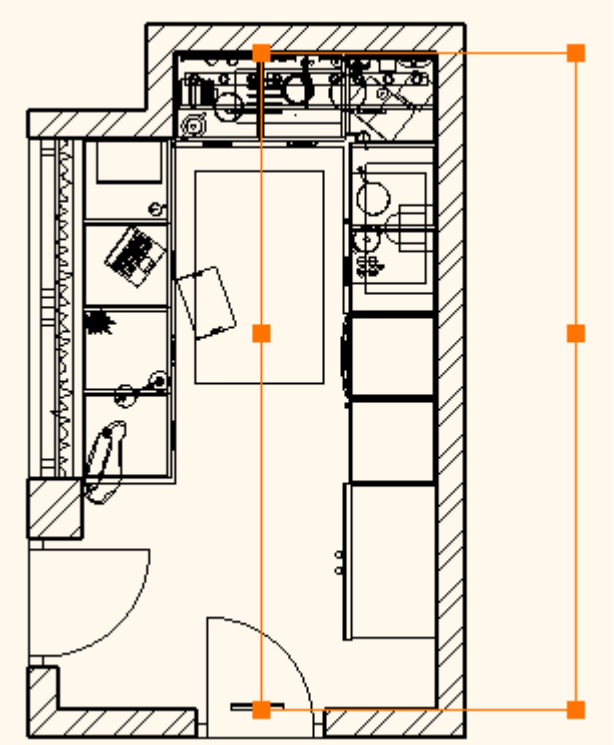
13. Wall elevation view snapshot

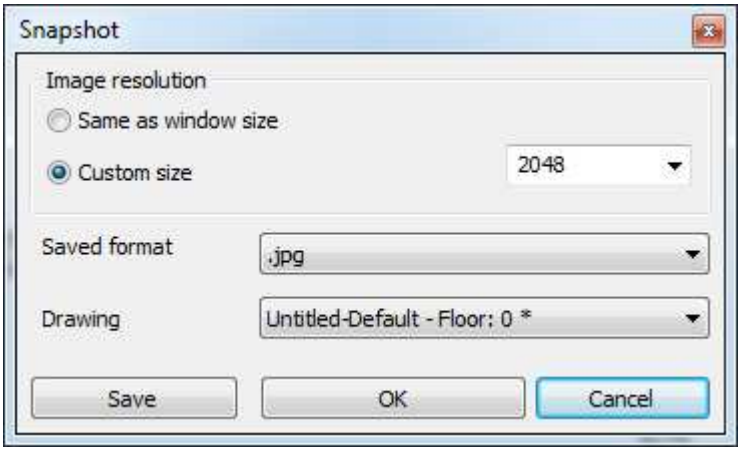
This command makes a frontal view of the selected wall together with a part of the 3D model.

You can select the wall and the visible wall side.
The program makes visible the part of the 3D model that is inside the polygon limited by the wall endpoints and the visible part click point.

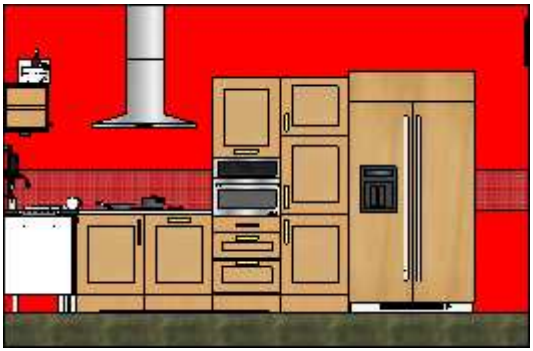
You can edit these polygon nodes and when you press the ENTER button the 3D partial model is created.

The perpendicular view of the wall will be placed as an image onto the selected floor plan.





Here is an example of the result:



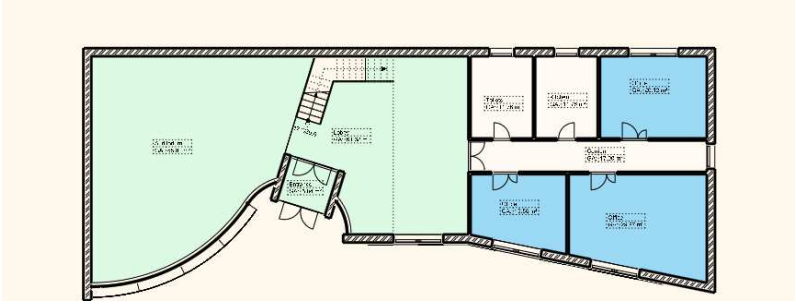
How to use the tool

- Start the View menu / Section / Wall elevation view snapshot tool. Also you can use the Wall elevation view tool in the Documentation part of the left side Toolbox.
- Choose the side where you would like to see the elevation from.
- Edit the automatically recognized contour as you wish, if necessary.
- Hit Enter
- Set the properties and click on OK.

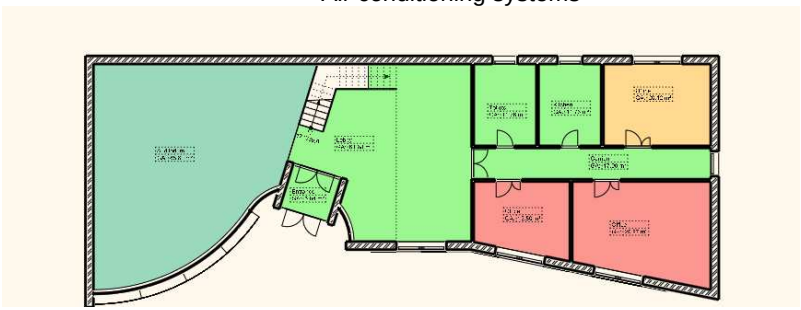
14. Zones

14.1. Concept

In ARCHLine.XP 2011 you can define zones in a building. Zones are groups of several rooms. You can use zones to represent ownership, to design heating or air conditioning systems, to visualise areas with different acoustic requirements, etc.



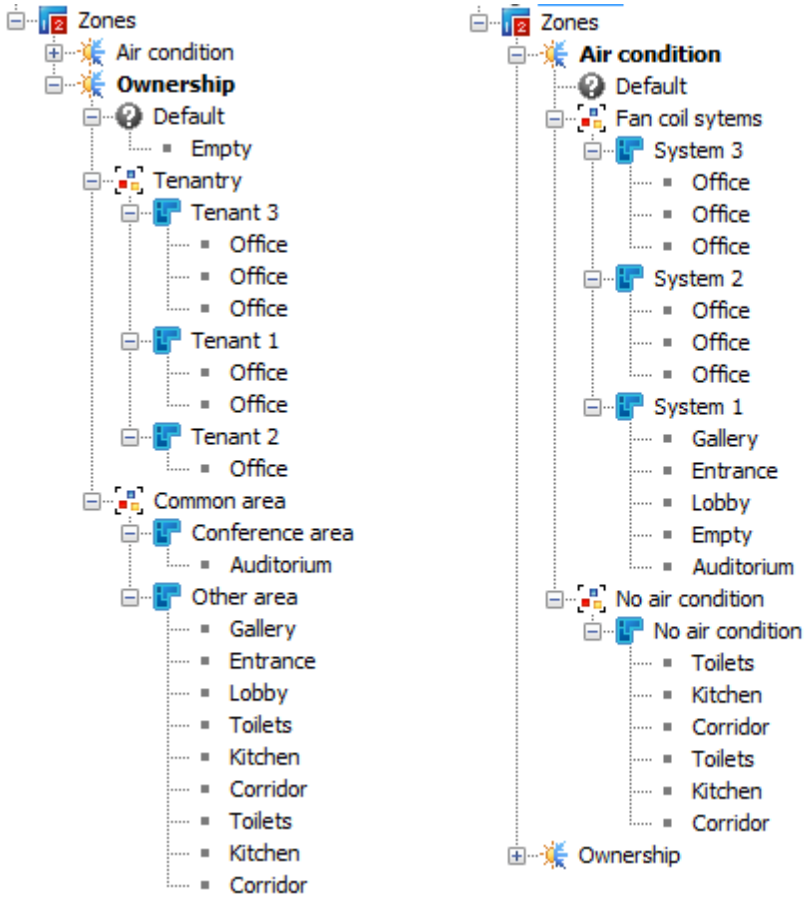
Air conditioning systems



Ownership

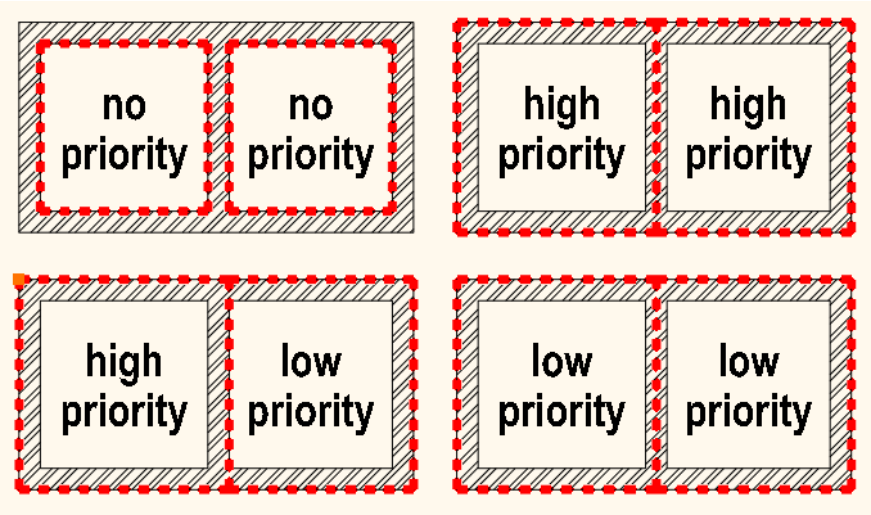
14.1.1. Zone categories

You classify rooms on a building in many ways. As for the ownership you can differentiate between tenants, if you would like to deal with air condition it is possible to define zones based on the required cooling and heating systems.



14.1.2. Zone groups and priorities

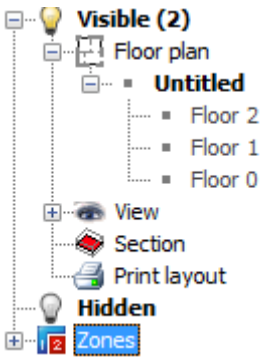
You can sort zones into several groups, if necessary. For zone groups you can define high or low priorities. Priorities are taken into consideration while calculating zone areas and volumes. If you use zone group priorities in a zone category, zone areas are extended by the thickness of the surrounding wall and slab structures according to the following figure:



14.1.3. Zones and colours

Finally you can define zones and add rooms to them. In a zone category every room can be added to one zone. Zones can be visualised by a unique zone colour.

14.2. Managing Zones



Project Navigator's tree structure is extended by a new item: Zones. You can expand or collapse branches by clicking the +/- signs in front of the tree items. By clicking on an item you can rename it.

By clicking on an item with the right mouse button a Local pop menu appears and you can select a command in it. Below you can learn about local pop menus of different tree items.

14.2.1. Zones (main tree item)

Create new category

A new zone category is added to the tree, with a default name. You can rename it by clicking on its name with the left mouse button.

Show zones with colours

Rooms will appear with zone colours of the active zone category.

Hide colours

Rooms will appear as empty polygons.

14.2.2. Zone category

Activate

It activates the current zone category. Area calculation and zone colouring is based always on the active category.

Create new zone group

A new zone group is added to the tree, with a default name. You can rename it by clicking on its name with the left mouse button.

Rename

It renames the current zone category.

Priorities and colours

The Priorities and colours dialog appears, here you can set the colours of the zones and the priorities of the zone groups in the current zone category.

Delete

Deletes the current zone category.

14.2.3. Uncategorized rooms

Add rooms to this zone

Select rooms on the floor plan and then press ENTER. The rooms are moved to the uncategorized zone.

14.2.4. Zone group

Create new zone

A new zone is added to the tree, with a default name. You can rename it by clicking on its name with the left mouse button.

Rename

Renames the current zone group.

Priorities and colours

The Priorities and colours dialog appears, here you can set the colours of the zones and the priorities of the zone groups in the current zone category.

Delete

Deletes the current zone group.

14.2.5. Zone

Add rooms to this zone

Select rooms on the floor plan and then press ENTER. The rooms are moved to the current zone.

Rename

Renames the current zone.

Priorities and colours

The Priorities and colours dialog appears, here you can set the colours of the zones and the priorities of the zone groups in the current zone category.

Delete

Deletes the current zone.

14.2.6. Room

Show on floor plan

Selects the room on the floor plan.

Rename

Renames the current room.

Room properties

Opens the Properties dialog of the current room.

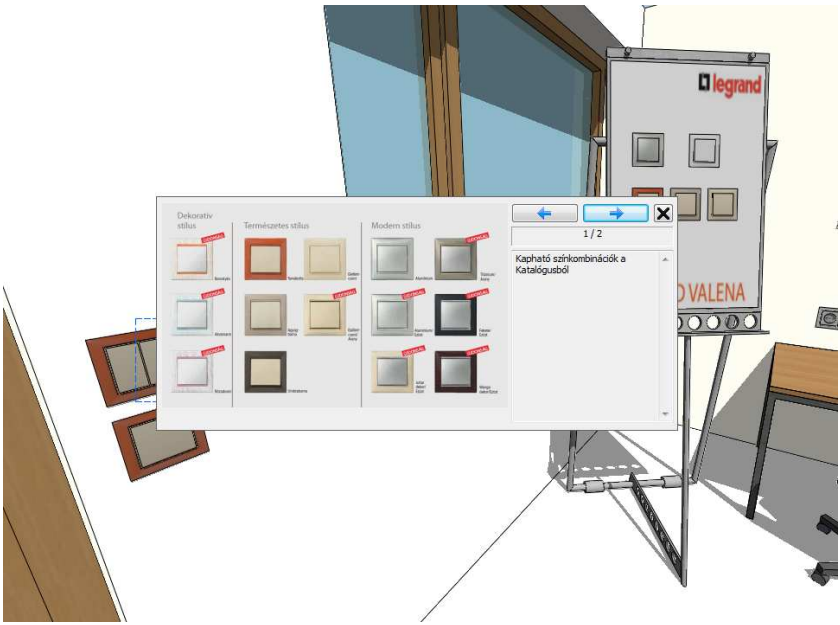
Remove from zone

The room is moved to the uncategorized zone.

.

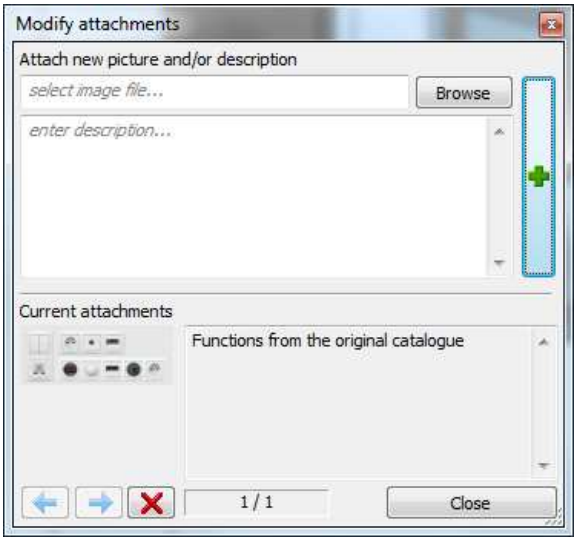
15. Attaching photo and description to elements

In ARCHLine.XP 2011 you can attach pictures and photos to any element of a drawing. This can be useful during a survey of a building by using the original photographs and compare it with the actual state of the model or 2D drawing.



15.1. Attaching photo and description to elements

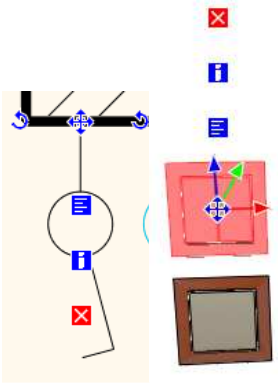
Click on an element with right mouse button and select the **Attaching photo / description** command from the local pop menu. The following dialog appears:

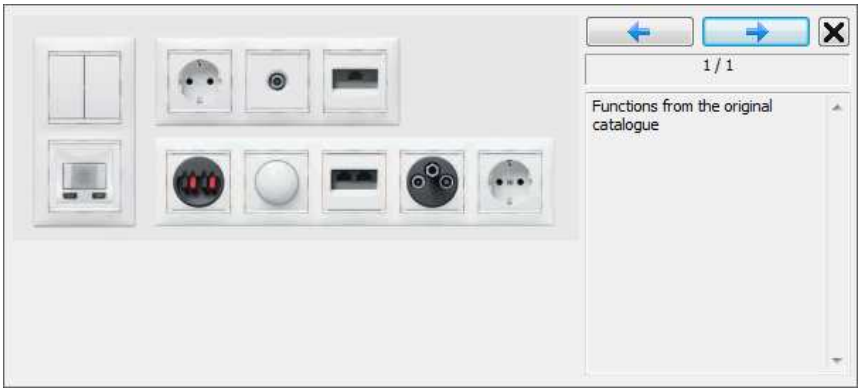


You can select an image with the Browse button and describe the element in the text field. Press the **+** button to attach them to the element. If more items are attached, you can step to the next one by pressing the arrow buttons. An item can be deleted by the **X** button.

15.2. Viewing attached photos and descriptions

Select an item on the drawing or in the 3D window. If an item has photos and descriptions attached to it, a marker appears besides to the regular ones. By clicking on it you can see the attached photos and descriptions. If more items are attached, you can step to the next one by pressing the arrow buttons.



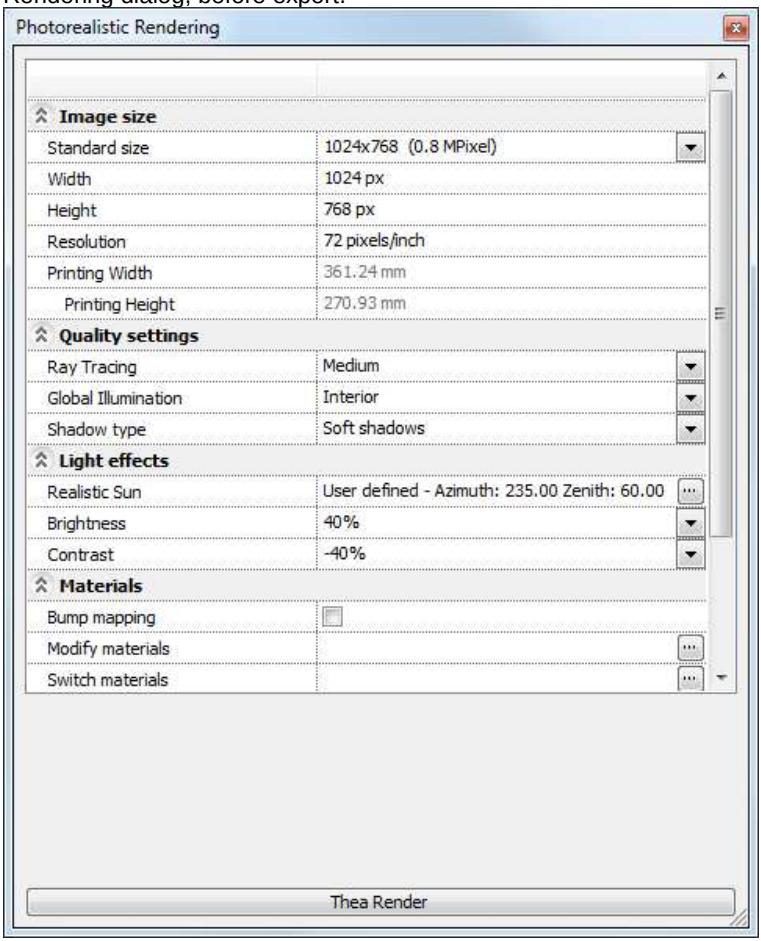


16. Support for Thea render

Thea Render is a state-of-the-art biased/unbiased renderer with a rich set of innovative features, a powerful material system and its own advanced studio, all-in-one.
ARCHLine.XP provides full support with native format data transfer that offers significant performance and very impressive rendering quality.
Learn more at www.thearender.com.

16.1. How to render with Thea?

You can export the 3D model directly to Thea by using File menu / Export / Thea command. You can change the settings in the appearing Photorealistic Rendering dialog, before export.



When you press Thea Render button, ARCHLine.XP exports the actual 3D model, including its materials and lights. Finally it starts Thea, commanding it to load and render the exported model, by using the given settings. The final result can be saved by Thea.

16.2. Photorealistic Rendering dialog

The settings in dialog of File menu / Export / Thea command might be very familiar to those who are using rendering. The general description of the settings can be found in the Help/Manual in the chapter entitled as Rendering / DirectX.

Some settings – due to the nature of the connection – might be partly or fully different from the general rendering settings, even if the name is similar to those. Because of these differences you can use the following list as a quick reference to understand how the settings will take effect in Thea when you change a setting in the Photorealistic Rendering dialog.

Image size

As in general, Image size settings will set the size & resolution of the image.

Quality settings

The Quality settings have large effect on the final image by means of quality and rendering time. Higher quality values are usually resulting in longer rendering time also.

Ray Tracing

At Ray Tracing setting you can choose from the following: Low, Medium, and High. These settings change the depth of ray tracing in Thea. The depth of ray tracing means the bounces of a light which is used for the rendering calculations. If the value is higher, ray tracing takes longer to calculate as the software traces the light longer on its path. This also means that the result will be more realistic.

Global Illumination

You can choose from multiple options when opening the Global Illumination list. Most of the settings will be able to represent the effects of the indirect lights which feature leads to a very realistic result. Using the global illumination the software is able to calculate those details that are created by “light illuminations” all around us at every moment.

The first three options are equivalent to those you may already know from the general rendering dialog of ARCHLine.XP. These are the Interior, Exterior & Disabled settings.

Interior pre-set is optimised for interior scenes, while exterior is for the others. The reason why these two settings are separated is quite similar to the reason why digital cameras have different pre-sets for interior & exterior scene shooting (e.g.: Landscape & Indoor). When you choose Disabled, Thea will calculate the exported model only by using direct lights, which is less real, but

takes a very short time to calculate to have a useful result where you can see the reflections, lights & materials already.

In the second part of the list after the first three you might find more pre-sets, depending on your Thea installation. If the user created other render pre-sets in Thea, those will be listed here also. (Render pre-sets in Thea are similar to ARCHLine.XP sets. They are storing render settings and they can be created by the users also). If the user did not create any, then the list will show only the default Thea pre-sets.

The following list is a quick guide about the default Thea render pre-sets for your information:

- Unbiased (TR1) – Unbiased quality for Exteriors
  This pre-set is very useful when rendering scenes where direct light is dominant (e.g.: Exteriors).

  One of Thea's special features is that it can render images in unbiased quality. In unbiased modes, the software calculates the image in multiple passes, and you can save the result any time, you find it clean enough.

  Advantage: you do not need to go to change the setting's details to have a photo-like render. Disadvantage: usually, it takes long time to render enough passes to remove the noise from the images.

- Unbiased (TR2) – Unbiased quality for Interiors
  This pre-set is used mostly when indirect lighting is dominant (e.g.: Indoor scenes) & when one should see caustics. Caustics are visible when for example the water draws the caustic lights to the bottom surface of the swimming pool.

  Advantage: you do not need to go to change the setting's details to have a photo-like render. Disadvantage: usually, it takes long time to render enough passes to remove the noise from the images.

- Direct Lighting
  This pre-set calculates direct lighting only and with no indirect (scattered) lights. This pre-set is used mainly for quick exterior renders.

  Advantage: rendering time is low. Disadvantage: the final image is mostly too dark and has high contrast (interiors are highly affected), because no indirect light is calculated.

- Final Gathering

This pre-set can be used for interiors and exteriors also, because it is able to visualize scattered lights too.

Advantage: rendering time is low and the quality is pretty realistic, because there are serious simplifications in the calculations. Disadvantage: the result can be grainy, thus the user needs deeper knowledge in detailed render settings of Thea.

- Photon mapping
  This pre-set has a fast and realistic result. It can visualize indirect light effects & contains final gathering solution too besides other calculations.

  Advantage: Reasonably quick result with indirect light effects. Disadvantage: The image is not accurate, and without adjusting the settings in Thea it can be used only for rough rendering.

- Visualization (PM 1mil)
  A low quality Photon mapping pre-set, with simplified calculations and no final gathering.

- Visualization (PM 10mil)
  A medium quality Photon mapping pre-set, with simplified calculations and no final gathering.

- Clay render
  This pre-set is very useful when you would like to visualize the model with simplified materials (every material is grey & there is no texture), but realistic light effects. This way you can study the real light effects without letting the different colours & textures of materials to mislead you.

  Advantage: A special representation which lets you to observe the lights in the scene objectively, revealing too dark or too bright parts of it. Disadvantage: Because of indirect light calculations rendering time can take moderately long.

If you create your own render pre-sets in Thea then they will be listed in this list making the customized workflow smoother, and letting advanced users to use their own well-defined settings.

Shadow type

You can choose from different shadow representations to visualize the final render.

16.2.1. Light effects

Realistic Sun

At this option you can set the geographical location, the north direction & the time and date of the model. This way the sun lights will be perfectly realistic.

Brightness

Controlling the brightness value in the Photorealistic Rendering dialog you actually control the same Thea Darkroom post-process.

Contrast

Controlling the contrast value in the Photorealistic Rendering dialog you actually control the same Thea Darkroom post-process.

Materials

These tools let you change the materials before exporting the model.

16.2.2. Background properties

User defined background

By ticking the User defined background option you can specify a background on your own for the scene. When this option is enabled, the Type settings become available too.

Type

You can set the following background types for the rendering:
Uniform, Gradient, Image

Each setting lets you change more options depending on the type you have chosen.

16.3. Thea materials

In ARCHLine.XP you can directly use materials which were created in Thea, by a special referencing method.

16.3.1. Thea material library in ARCHLine.XP

After installing ARCHLine.XP you will find a material library which is called Thea_Render in the Material manager.

This folder contains the default materials of a Thea Render installation. When using them you actually create a reference for the original materials which can be found in Thea, so the software will use the original physically correct ones, instead of a conversion.

If you use other ARCHLine.XP materials and you do not use reference materials, they will be converted to a format that Thea can handle.

16.3.2. Thea reference material

Using the ARCHLine.XP + Thea Render communication, you have the possibility to command Thea to use original Thea materials instead of a conversion.

Thea's material definition is more advanced & with this possibility you have the choice to use that advantage right in the export. Expert users can use this feature for linking their existing materials to ARCHLine.XP model surfaces. These link materials are called reference materials.

You can link a Thea material from its material libraries by creating the reference material of it in ARCHLine.XP. The name of the reference material must match with the original name and a prefix will tell the software that it is actually a reference (alias) to the original. The prefix is: Thea_ (or @@)

Example:

- Create a beige coloured material in Thea with the following name: Glossy_beige_test
- Create a reference material with grey colour in ARCHLine.XP by using the following name: Thea_Glossy_beige_test (or @@Glossy_beige_test).
- Use this newly created material in your model and export the model to Thea.
- When the render is finished, you will see that instead of having a converted grey Thea_Glossy_beige_test material, your model contains a beige material called Glossy_beige_test with the original properties.

16.4. Conversion

Due to the differences of Thea Render & ARCHLine.XP, the two software communication is based on a data conversion.

The following description might help you understanding the nature of the conversion.

16.4.1. Material conversion

ARCHLine.XP materials if they were not created as Thea reference materials are converted by the following rules.

ARCHLine.XP material	Material in Thea Render
Matte	100% Basic
Metal	100% Basic + 100% Glossy
Phong	100% Basic
Plastic	100% Basic
Glass	30% Basic + 100% Thin film
Mirror	30% Basic + 100% Glossy
Emissive	100% Basic + Emitter

Light conversion

The lights in ARCHLine.XP are converted by the following rule during the export.

ARCHLine.XP light	Light in Thea Render
Sphere	Omni
Spot	Spot
Linear / Polyline	3D object with emitter
Area	3D surface with emitter
Sun	Sun

16.5. Using Thea Render application

You can find detailed description about using Thea Render application and its features if you click on the Help / Open / User Manual (PDF) in Thea.