Allplan 2015

New Features in Allplan 2015-1

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Contents

Welcome!

Dear Sir or Madam,

We are aiming to develop an Allplan version providing you with the tools best suited for your daily tasks. With the current Service Release Allplan 2015-1, you will benefit from various improvements. Above all, Allplan is now even easier to use!

BIM helps you improve the quality of your projects, react flexibly to changes and increase efficiency on the whole.

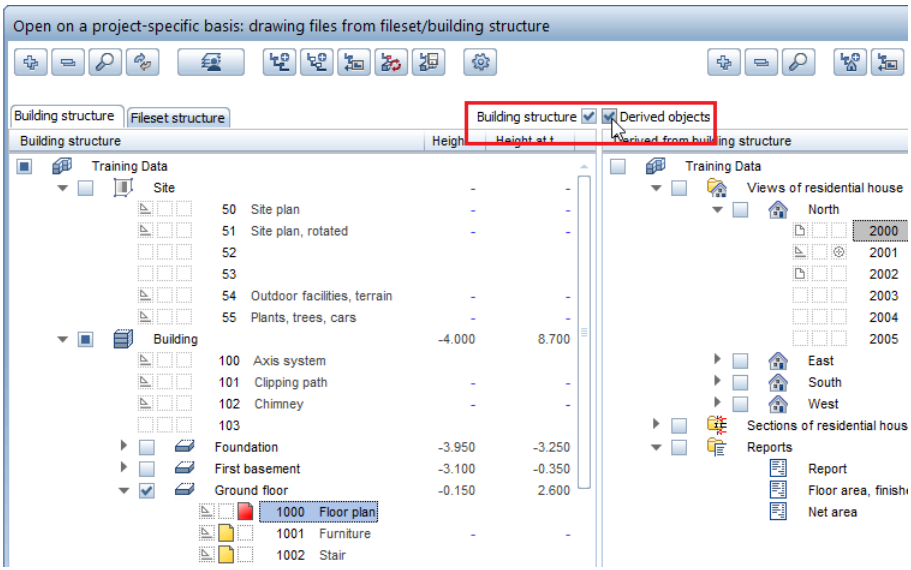
We wish you every success!

Nemetschek Allplan Systems GmbH

General New Features

Building structure and objects derived

When you open the **Building structure** tab in the **Open on a project-specific basis** dialog box, you can now enable or disable the **Building structure** part (on the left) and the **Derived from building structure** part (on the right) independently of each other.



If, in earlier versions, you set a drawing file to **Current** in **Derived from building structure**, the program automatically set the current drawing file in the **Building structure** part on the left to **Open in edit mode**. This is useful if you are working in both parts at the same time. However, this is a rather unusual situation.

If, in Allplan 2015-1, you disable the other part before you select drawing files, the status of the selected drawing files there will not change. Selecting or clearing the check box of the project structural level, on the other hand, also affects the check boxes of all subordinate structural levels.

Double-clicking in the 'Height' column

Double-clicking anywhere in the **Height at top** or **Height at bottom** column in the building structure opens the **Assign Planes** dialog box. Of course, you can still use the shortcut menu to open this dialog box.

Switching structural levels on and off

The check boxes for the structural levels of the building structure now react consistently when you select subordinate drawing files:

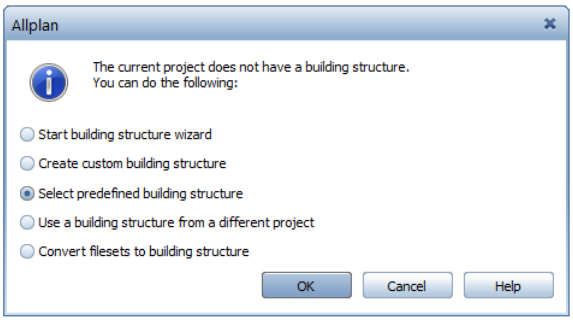
- As soon as you switch off the last drawing file of a structural level, Allplan will automatically clear the check box of the superordinate structural level.
- As soon as you switch on the first drawing file of a structural level, Allplan will automatically select the check box of the superordinate structural level.
- Allplan only adjusts the superordinate structural level; any subordinate structural levels stay the same.

Of course, you can still switch structural levels on and off by simply clicking the associated check boxes.

Dialog box for selecting building structure

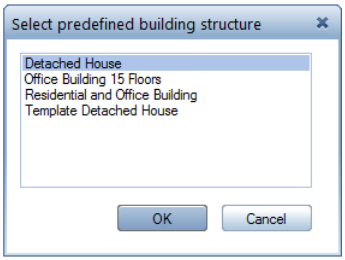
You can see this dialog box when you open the **Building structure** tab in a project without a building structure.

The sequence of the options has changed: The first option is now **Start building structure wizard**, followed by **Create custom building structure**.



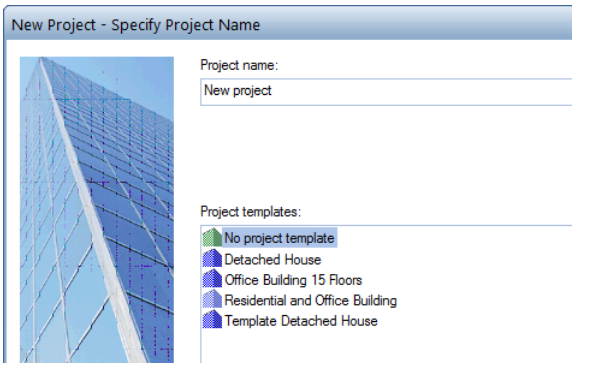
Tip: After you have deleted the building structure, this dialog box will open automatically.

Choosing **Select predefined building structure** opens a list. You no longer have to navigate to the folder with the structures.



Project structures replaced by project templates

The project structures of earlier versions are no longer available. Instead, you can now use project templates. You can no longer create your own project structures; existing project structures are not displayed anymore.



The last dialog box is no longer available, as it has become unnecessary. As a result, you can now create new projects more quickly.

Deleting projects

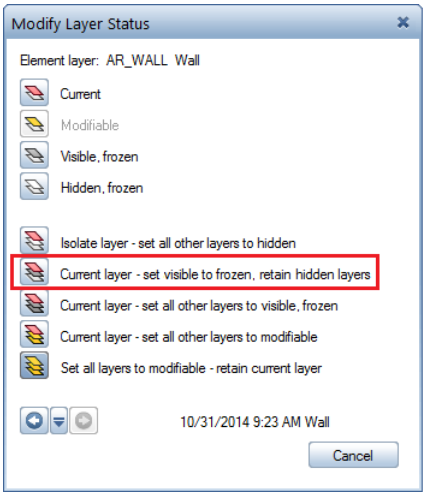
Deleting projects is much faster now: instead of two messages, you have to confirm only one message.

New option for changing the status of layers

Modify Layer Status includes a new option:

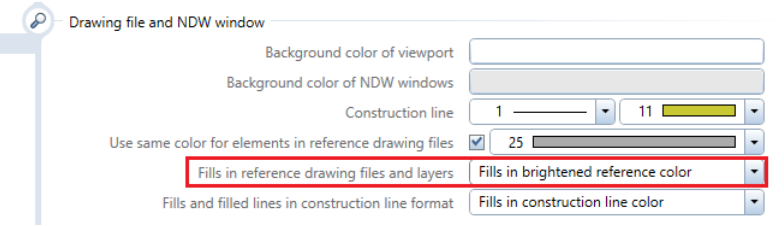
Current layer - set visible layers to visible, frozen and retain hidden layers

This option selects the layer of the element clicked as the current layer and sets all the other visible layers to visible, frozen (with the exception of the default layer). The status of hidden, frozen layers stays the same.



Fills on frozen layers

To display fills on frozen layers, Allplan now uses the setting in the **Options** on the **Display** page. Consequently, fills on frozen layers behave like fills in reference drawing files.



If the **Display elements on frozen layers using a fixed color** option is active in the **Layer** dialog box, Allplan uses the color selected there as the reference color.

NDW files as custom XRefs

Changing the drawing type changes the manner in which style areas are displayed. This is now taken into account by NDW files inserted as custom XRefs in drawing files. The only requirement is that the NDW file includes the drawing type selected in the drawing file. If this is not so, Allplan displays the style areas exactly as they looked like when you saved the NDW file.

If you want to use drawing files across projects, save the drawing files as NDW files using the **Save Copy as...** tool. Make sure you use the same drawing types with the same settings. Basically, if the drawing types are identical, Allplan always uses the settings of the NDW file to display style areas in custom XRefs.

Note: Custom XRefs still ignore changes in the status of layers. When you save the NDW file, Allplan always uses the existing status.

Managing MicroStation libraries more easily

When exchanging data with MicroStation V8 in earlier versions, you specified the path the program was to scan for MicroStation libraries (`*.dgnlib`) and MicroStation cell libraries (`*.cel`). All the libraries in this path were used alphabetically. Now you can specify the library files you want to use and the sequence in which the program is to process the files. In addition, you can save the sequence to favorite files.

To do this, open the **MicroStation V8 specific** tab and click **Advanced resource administration**.

Selecting drawing files using the space bar

The **Select Drawing File** dialog box is used by a lot of tools, such as  **Copy, Move Elements between Documents** or  **Copy, Convert Elements Across Drawing Files**. In order to find a specific drawing file, you can enter its number in this dialog box. However, Allplan does not automatically select the drawing file found.

In earlier versions, you had to click the drawing file. Now your hands do not have to leave the keyboard: all you need to do is press the SPACE BAR.

Improved search tool in Allplan Help

We improved the search tool in the Allplan Help.

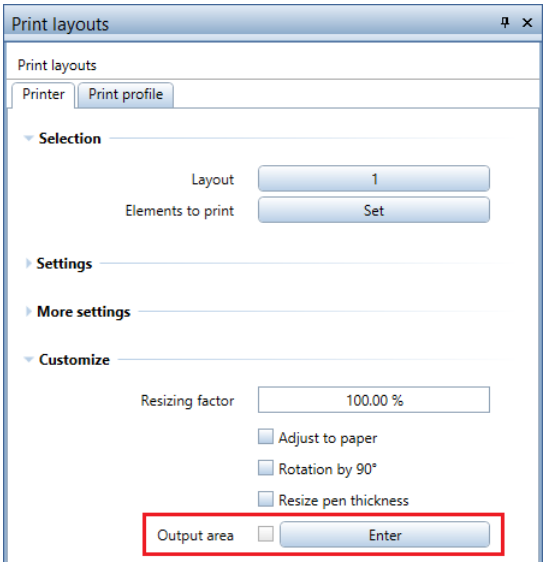
If you enter more than one term in the  **Search** box, Allplan looks for these terms based on the following criteria:

- Allplan finds the topics that include all search terms you specified. It shows these topics *in any sequence*.
- If you enclose the search terms in quotation marks, Allplan shows the topics *in the sequence you entered the search terms*.
- You can use the "-" character to exclude a word. For example, enter **workgroup -online** to find the topics that include "workgroup" but that do not include "online".
- When you select **Match partial words**, Allplan also shows topics where the term specified is part of a word.

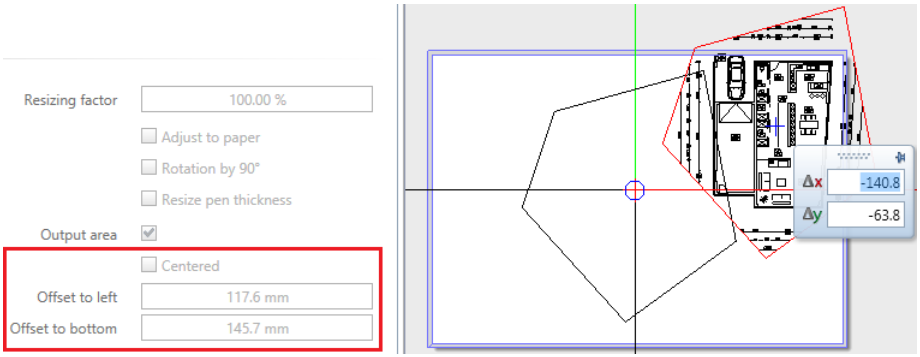
Layouts

Output area of layouts

If you want to print only the current layout using the **Print Layouts** tool, you can now define an output area for this layout. You can then print only this area using the settings specified in the **Output mode** area. In the **Customize** area, click the **Enter** button to the right of **Output area**. Define the area by clicking the corners of any polyline. Clicking two diagonally opposite points creates a rectangular area.



After you have defined the output area, Allplan hides the data outside this area and creates a page based on the parameters of the printer set. In order to define the position of the output area on this page, you can select the **Centered** option or you can define how far the bottom left corner of the min/max box is from the bottom left corner of the printable area. As an alternative, click the output area, grab the handle and drag it to the right position.



Define the other settings as usual. Make sure you adjust the paper format to the output area (click in the **Settings** area). You can also adjust the output area to the paper (select the **Adjust to paper** option in the **Customize** area). Finally, make settings in the **Output mode** area and start printing. Allplan resets the settings to the state before you defined the output area.

Print profile for new layouts

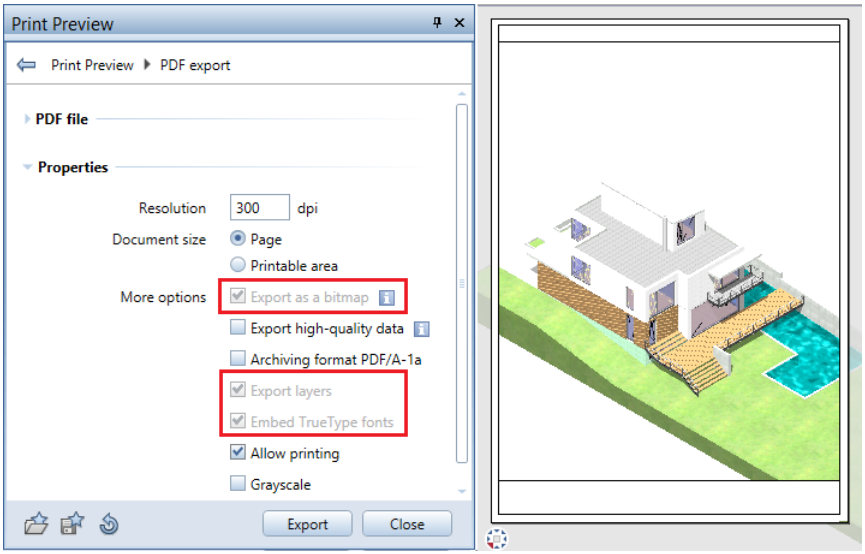
So that you do not have to select each layout separately, you have been able to assign a print profile from any path to several selected layouts since Allplan 2014. In order to do this, open the **Open on a project-specific basis: layouts** dialog box and use the shortcut menu.

What's new is that the print profile of the last layout selected is now preset for new layouts.

PDF export as a bitmap

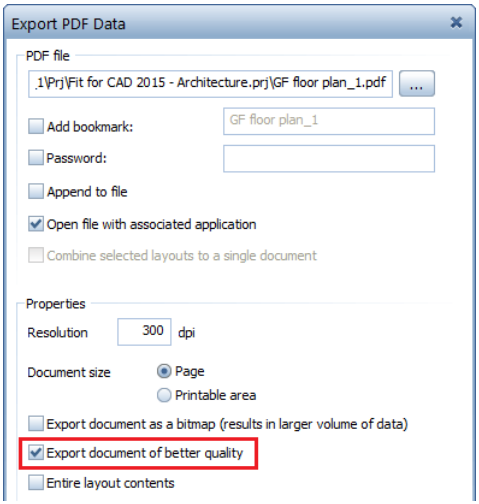
So that you can immediately see the effects of this option, Allplan automatically grays out all parameters that are not taken into account.

As the **Hidden**, **Animation** and **Sketch** view types display bitmaps, this option is now the default setting for exporting PDF data from **Print Preview**. You cannot change this setting.



Higher quality of PDF export

In order to export PDF data of higher quality, you no longer have to change the entry in the registry editor. You can now select this option directly in the dialog box.

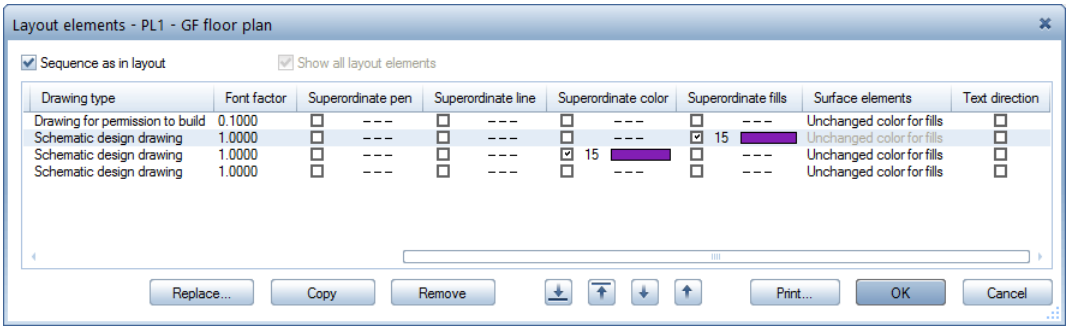


However, depending on the data exported, this option may increase the file size considerably.

Defining superordinate fills

In addition to pen, line and color, you can now define superordinate fills for layout elements in the **List Layout Elements** tool and the **Properties** palette or dialog box. This allows you to change the appearance of layout elements in layouts without having to change the elements themselves.

If you use superordinate fills, you cannot select **Surface elements**. By selecting superordinate color together with the **Brightened superordinate color for fills** setting for **Surface elements**, you will get brightened superordinate fills as usual.

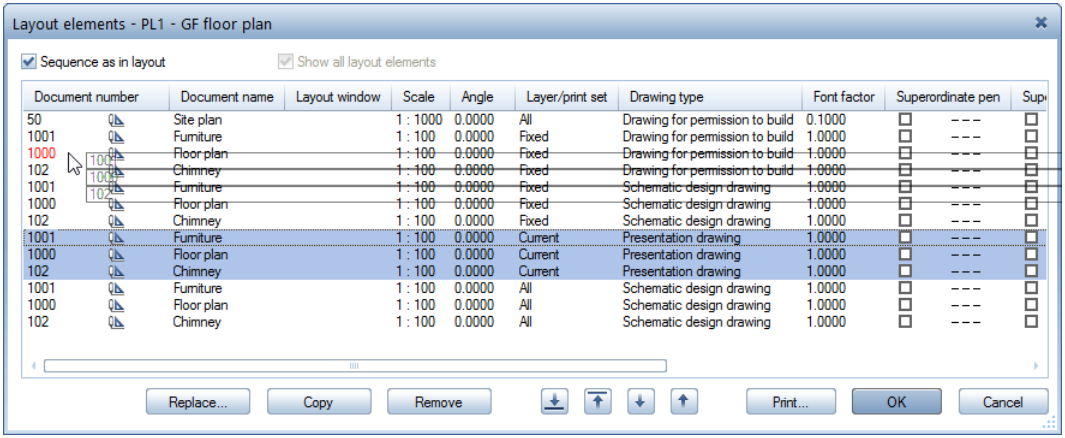


In addition, you can now use the **Filled Line** tool (**Paint** module) in the **Layout Editor**.

Moving layout elements by dragging

We improved the **List Layout Elements** tool by adjusting drag-and-drop operations to the procedure used in the dialog boxes of the architectural modules. Now you will find it easier to move layout elements by dragging them to a new position. You can select several layout elements as usual.

While dragging the selected layout elements, you can see a preview of these elements. The red document number indicates the new position of the layout elements. The sequence of the other layout elements does not change. When you drag a layout element down, Allplan positions it after the element in red. When you drag a layout element up, it is positioned before the red one.

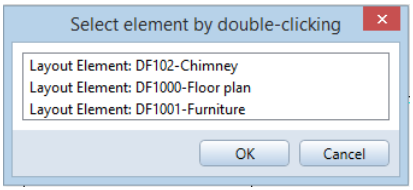


Note: You can only drag elements if you have selected the two **Sequence as in layout** and **Show all layout elements** options.

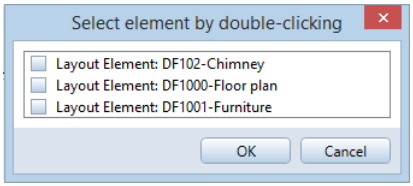
Selection option for transferring layer visibility

When working with layout windows and congruent layout elements in earlier versions, you could not select a specific layout element for transferring the layer visibility. Now you can do this by enabling the **Selection Option for Ambiguous Elements on/off (Filter Assistant)** before you select **Transfer Layer Visibility**.

If the program finds several layout elements at the point clicked, you can select the required layout element in a dialog box.



The same applies when you assign the settings: if there are several layout elements, you can select the layout elements in a dialog box.



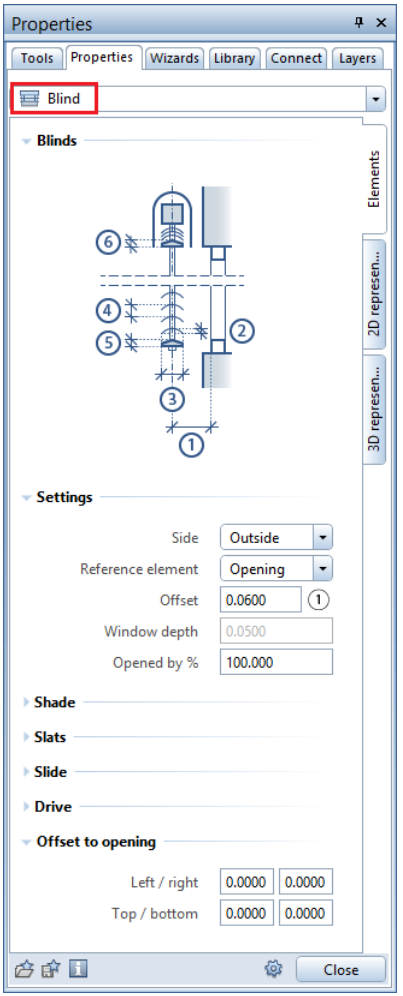
Architecture

New Architectural SmartParts

You can find two new tools for creating SmartParts in the **Basic: Walls, Openings, Components** module, **Create** area:

Shading SmartPart

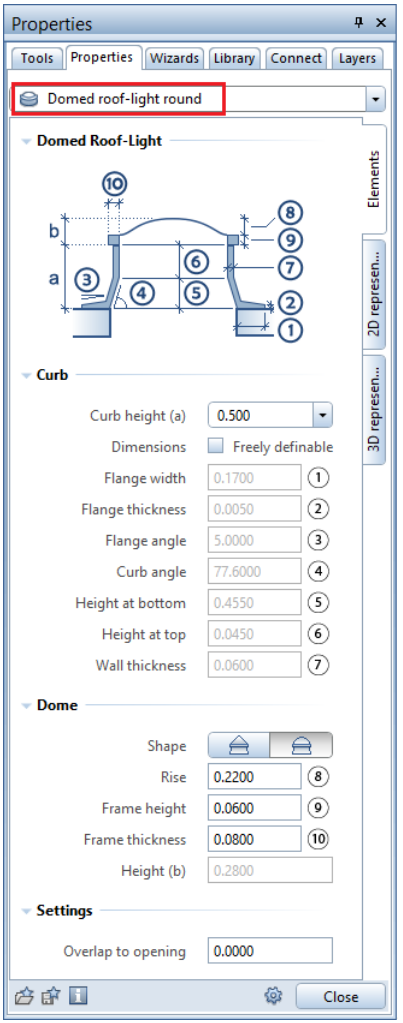
Blind SmartPart



You can analyze **blind** SmartParts using the **Reports** tool and the `Shading.rdlc or Roller shutters.rdlc` report.

Domed Roof-Light SmartPart

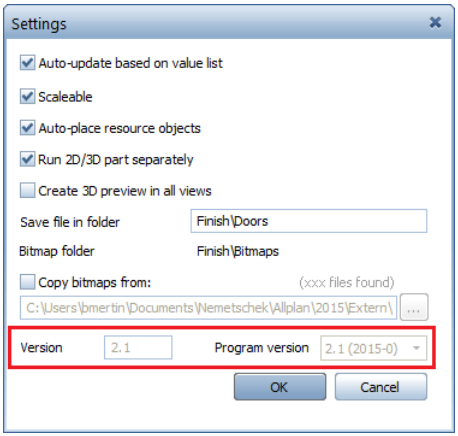
Domed roof-light round SmartPart



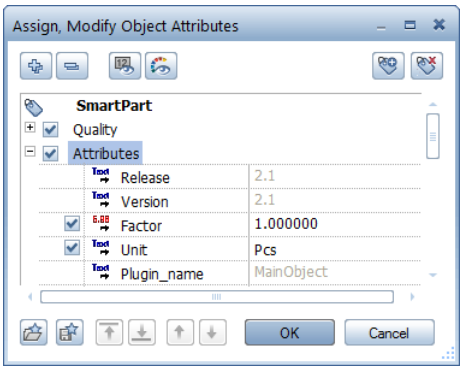
You can analyze **domed roof-light** SmartParts using the **Reports** tool and the `Domed roof-lights.rdlc` report.

Versioning

You can now find the version number of the script and that of the program in the **Settings** at the bottom of the palette for creating or modifying SmartParts.



The SmartParts' object attributes include the version numbers of the script and program.



These pieces of information are important if you use SmartParts of an older script version or program version, as these SmartParts do not have the newest functionalities. In order to give these SmartParts the newest functions, you can use the new **Transfer SmartPart Version** tool (**Bonus Tools** family, **SmartParts** module, **Change** area).

New tool for transferring the version of SmartParts

You can find a new tool in the **Change** area of the **SmartParts** module (**Bonus Tools** family):  **Transfer SmartPart Version**

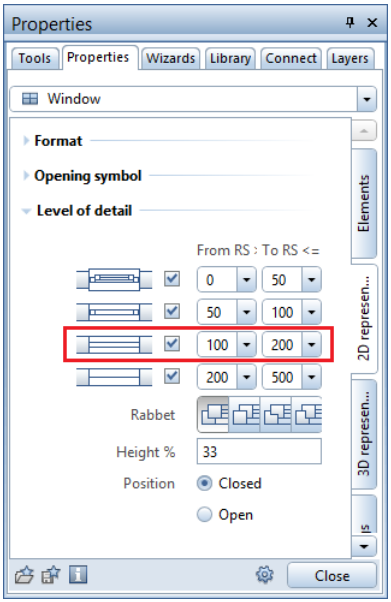
Using this tool, you can transfer the functionalities of the new program version to SmartParts created in older versions. In other words, you upgrade the SmartParts. The only requirement is that the current drawing file includes at least one SmartPart of the latest generation **and** the older SmartParts you want to upgrade. Do the following:

- Select the  **Transfer SmartPart Version** tool.
- Click the SmartPart of the newest generation.
- Select the SmartParts you want to upgrade. To do this, click the SmartParts one after the other or enclose them in a selection rectangle. You can also click the **All** button on the **SmartPart Migration** toolbar.
- Finally, click **Apply** on the **SmartPart Migration** toolbar.

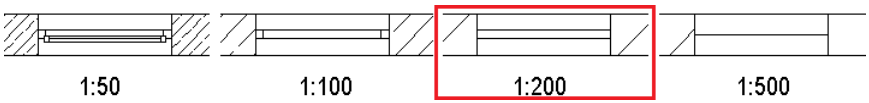
Open the  **Settings** (at the bottom of the palette for creating or modifying SmartParts) and check the version numbers of the script and the program.

New level of detail for representation in 2D

When creating a **Window SmartPart** or **Door SmartPart**, you can find a new level of detail on the **2D representation** tab.

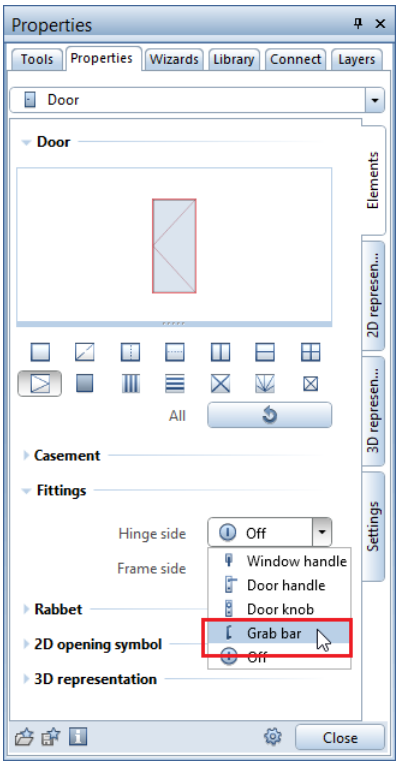


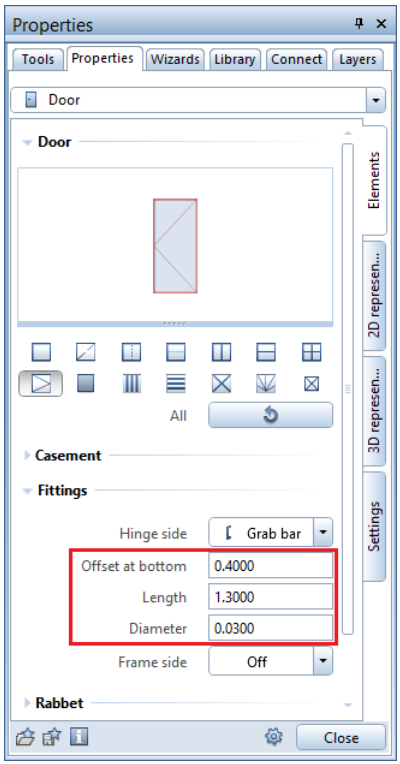
This level of detail shows frameless windows and doors in the scale range you defined.



New fittings for window SmartParts and door SmartParts

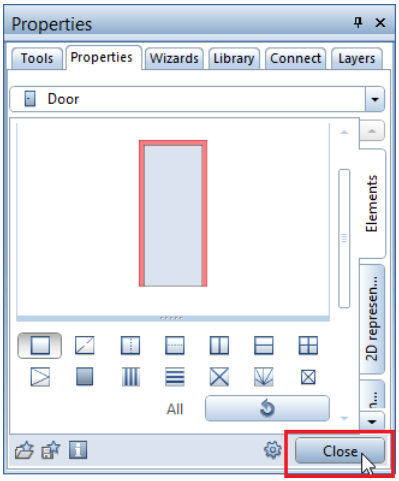
We added the **grab bar** to the list of fittings for window SmartParts and door SmartParts.
As with the other fittings, you can attach the grab bar to the hinge side and the frame side. After having selected the grab bar, you can define its **Length** and **Diameter** as well as the **Offset from the bottom**.





Close button in SmartPart palette

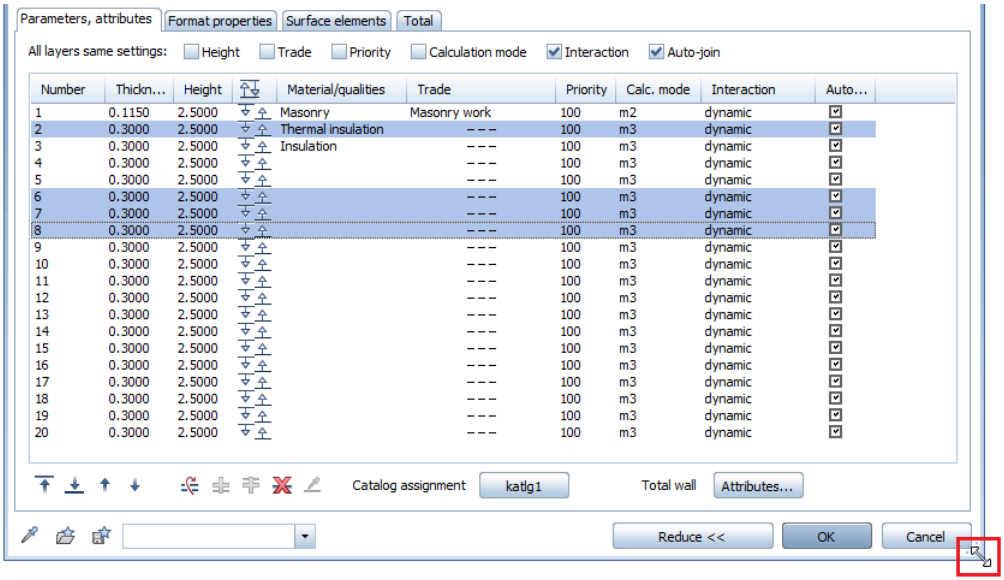
You can now use the **Close** button to quit the palette for creating and modifying SmartParts in the architectural modules. Allplan saves the entries.



New features for components

Wall dialog box can be enlarged

You can now enlarge the **Wall** dialog box. For example, you can adjust the dialog box so that you can see all 20 wall layers without having to scroll down.



Copying the properties of a single layer from another component

You can now copy the layer properties of existing components and apply these properties to other components. To do this, you can use the new **Match a layer from viewport** option. You can find this new option in the dialog boxes of tools you can use to create linear components with multiple layers, such as the **Wall** or **Upstand** tool. The **Plumbing Component** and **Roof Covering** tools also include this new option.

You can apply the properties of a layer in the drawing file only to an existing layer. If you want to do this for a new layer, you first need to insert the new layer where you require it.

To use the properties of a single layer in the drawing file

➲ The **Wall** dialog box is open.

1 Click in the **Number** column to select the layer whose properties you want to replace with those from the drawing file.

Note: To apply the properties to a new layer, you first need to insert the new layer where you require it. To do this, you can use **Copy layer and insert it before the selected line** or **Copy layer and insert it after the selected line**.

2 Click **Match a layer from viewport**.

3 In the viewport, click the layer whose properties you want to use.

Note: If you want to copy the properties of a layer in a roof covering, the easiest way is to click the layer in elevation or isometric view. When you click it in plan view, Allplan will copy the top layer.

The program replaces the properties of the selected layer with those of the layer clicked.

More tools for editing lines or layers

In Allplan 2015 you can work with up to 20 wall layers.

Now you can use the following tools to edit and move layers quickly and easily. You are certainly familiar with these tools from other modules.

 **Move to the top**

 **Move to the bottom**

 **Move up**

 **Move down**

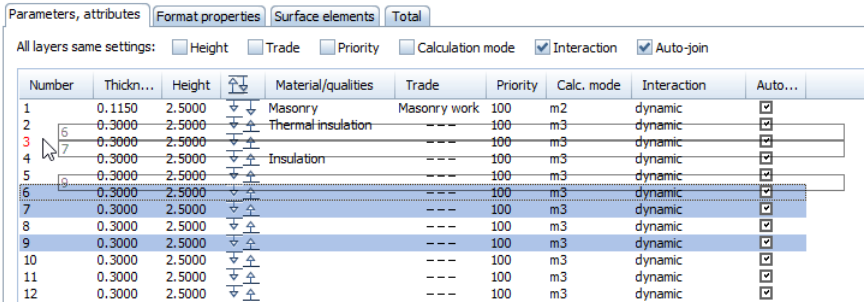
Multiple selection

For editing, you can now select several lines or layers in a single step. Use the shortcut keys as usual in Windows:

- A click selects a line or layer.
- CTRL+click selects several lines or layers in any sequence.
- SHIFT+click also selects the elements between the lines or layers clicked.

Moving layers by dragging

You can move layers by dragging them to a new position. Allplan displays a preview of the selected layer. The red number indicates the new position of the layer. Normally, Allplan inserts the layer after the red number. However, if you drag a layer to the top, Allplan inserts it before the first layer.



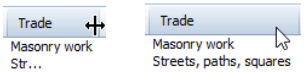
All tabs with same selection

When you select lines or layers on a tab and then switch to another tab in the same dialog box, you will find the same lines or layers selected on this tab.

Double-clicking separator in column header

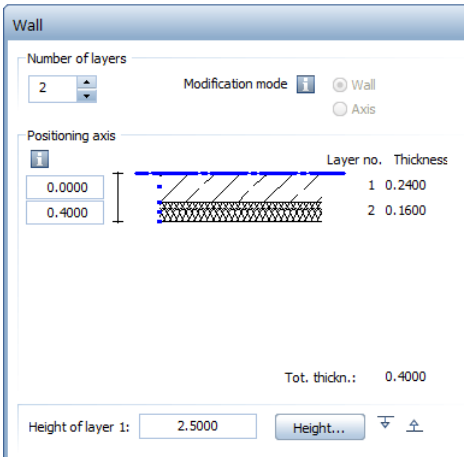
You can now enlarge the columns in dialog boxes (for example, in the **Wall** dialog box) just as you would in any other application (for example, in MS Excel).

All you need to do is point to the right end of a column header. Wait until the cursor changes to a separator with two arrows. Then double-click. Allplan will enlarge the column so that you can see the entire text in this column.



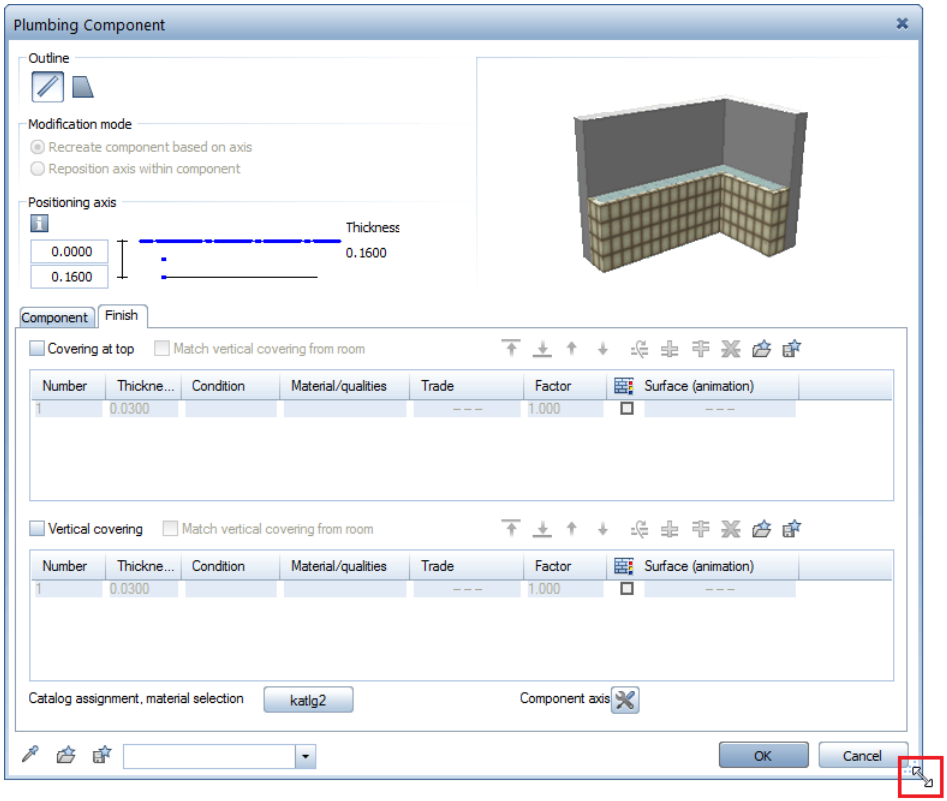
New default setting for wall

We changed the default setting for the **Wall** tool. You will see this new setting when you open the wall dialog box after having installed Allplan for the first time or carried out the hotline tool **cleanup**.
The new default setting is a wall with two layers: 24 cm reinforced concrete and 16 cm insulation.



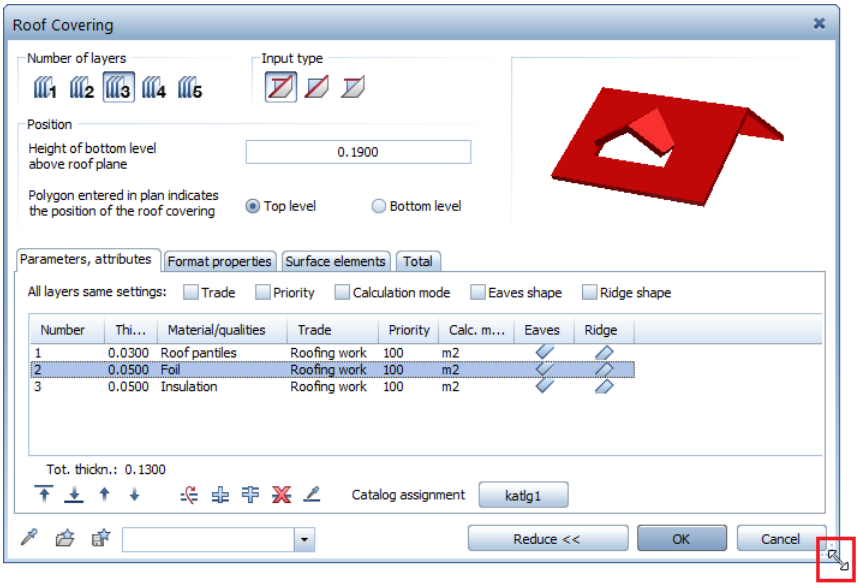
Plumbing component dialog box

Like the **Wall** dialog box, the **Plumbing Component** dialog box includes some new features. For example, you can enlarge this dialog box or use the tools for editing layers.



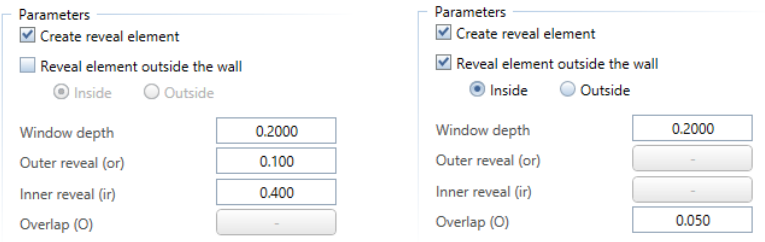
Roof covering dialog box

Like the **Wall** dialog box, the **Roof Covering** dialog box includes some new features. For example, you can enlarge this dialog box or use the tools for editing layers.



Reveal partially outside

When entering window openings and door openings in earlier versions, you could place the reveal completely inside or outside the opening.



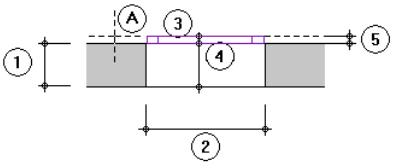
Using **Define, Modify Reveal**, you could move the reveal partially outside the opening. However, the **Restore 3D View** tool with the **Recreate** option always set the reveal back to its default setting.

In **Allplan 2015-1**, you can now create a reveal which is partially outside the opening. The only requirement is that the reveal is in contact with the opening.

If you want to create the reveal partially outside the opening, you can use the **Outer reveal** and **Inner reveal** parameters. Please note that the value for **Inner reveal** includes the value for **Window depth** or **Door depth**.

Reveal partially on the outside

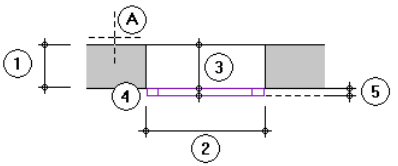
If you want the window to project from the exterior side of the wall, you can add the projecting part to the value for **Inner reveal**. The maximum value for **Inner reveal** is wall thickness plus window depth. As a result, **Outer reveal** is negative. Its value equals that of the projecting part.



A	Wall line clicked = exterior side of opening
1	Wall thickness
2	Opening width
3	Outer depth of reveal (negative; cannot be greater than depth of opening element 5)
4	Inner depth of reveal + projecting part (cannot be greater than depth of opening element 5)
5	Depth of opening element (for example, window or door)

Reveal partially on the inside

If you want the window to project from the interior side, you can enter the wall thickness for **Outer reveal**. As a result, **Inner reveal** is zero and the window is in contact with the interior side of the wall.



A	Wall line clicked = exterior side of opening
1	Wall thickness
2	Opening width
3	Outer depth of reveal (cannot be greater than wall thickness)
4	Inner depth of reveal (is zero if outer reveal equals wall thickness)
5	Depth of opening element (for example, window or door)

You can use the following tools to create this kind of reveal:

-  Door
-  Window
-  Corner Window
-  Define, Modify Reveal

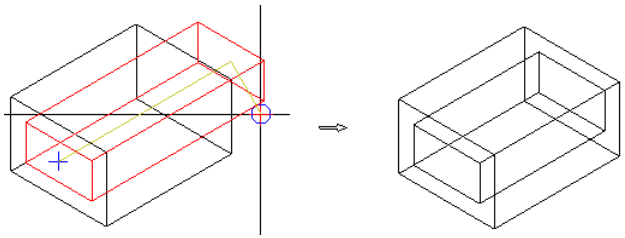
3D Modeling

A new option for extruding

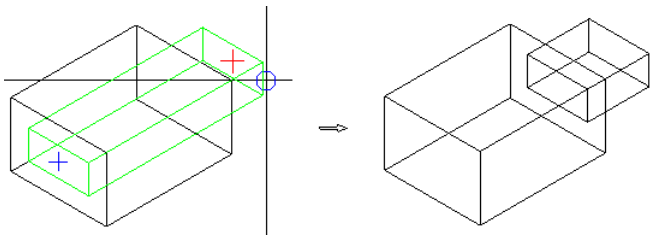
The **Extrude** tool offers the new **Always add solid** option on the Context toolbar. Using this new option, you can specify how the extruded solid behaves when it penetrates the existing solid.

The extruded solid penetrates the existing solid:

- **Always add solid** is not active (set by default):
  The penetrating solid will be subtracted.



- **Always add solid** is active:
  The penetrating solid will be added.

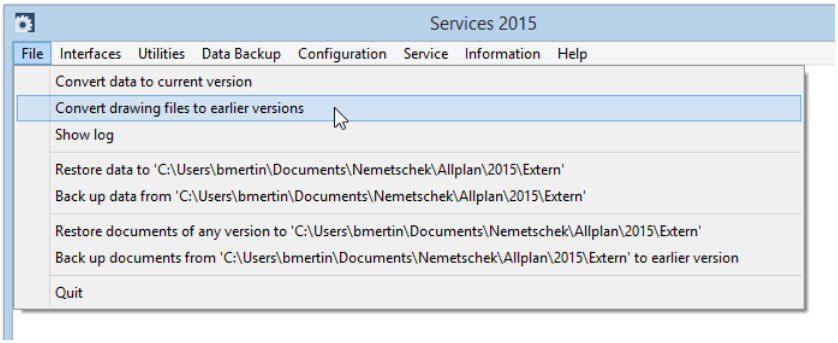


Presentation

Converting new surfaces to earlier versions

Services application, converting drawing files to earlier versions

Using "Convert drawing files to earlier versions" on the "File" menu in the Services application, you convert not only all the drawing files but also all the surfaces in all folders and subfolders. The preview is also converted. Instead of **Global Illumination**, **Ray tracing** is now used for rendering the preview.

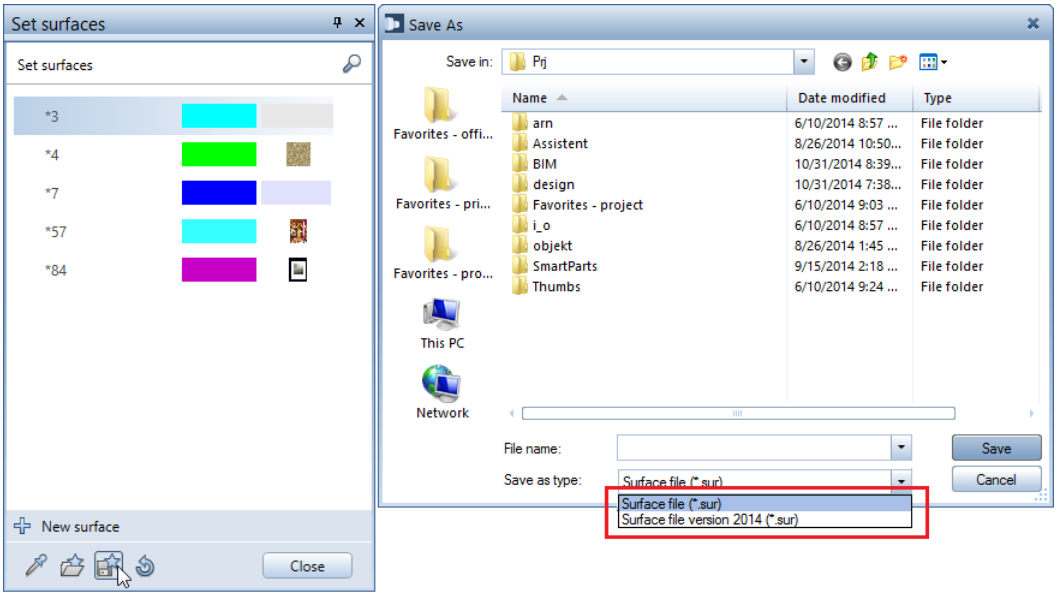


Free NDWs

If you use **Save Copy as** (**File** menu) to save a drawing file or document as an NDW document of version 2014, 2013 or 2012, Allplan automatically converts all surfaces to the version selected (regardless of whether these surfaces were assigned using **Set Surface** or **Assign Custom Surfaces to 3D, Archit. Elements**). The preview is also converted. Instead of **Global Illumination**, **Ray tracing** is now used for rendering the preview.

Surface favorites for earlier versions

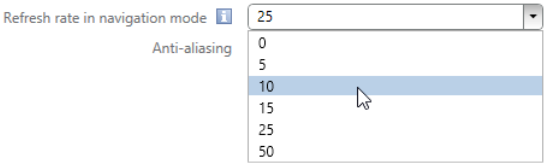
You can use the **Set Surface** tool to assign surface properties (incl. luster, reflection and transparency) to each line color and pen color. If you want to use these assignments in **Allplan 2014**, too, you can save them as favorites in **Allplan 2014** format. The surface settings are converted to this version.



Refresh rate in navigation mode

Using the **Options - Desktop environment - Display**, you can now set smaller values for the **Refresh rate in navigation mode**: in addition to **25** and **50**, you can now select **5**, **10** and **15**.

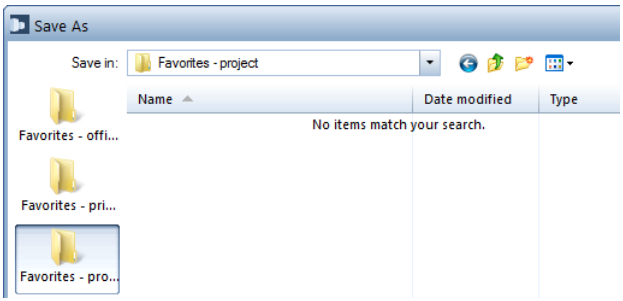
By choosing the appropriate setting, you can display data-intensive models in their entirety (for example, bar reinforcement).



Ease of use

Same dialog box for saving files

You can now find the same **Save File** dialog box anywhere in **Animation**. In order to select the Allplan-specific paths, you can click the corresponding buttons.



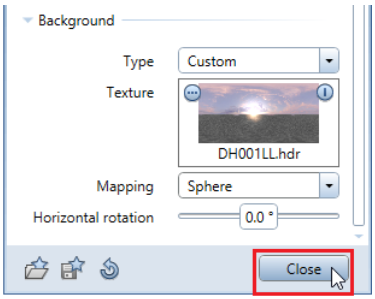
Animation palettes adjusted

We adjusted most of the new animation palettes, making them easier to use. For example:

- **Camera path** palette (**Set Camera Path**)
- **Set surfaces** palette (**Set Surface**)
- **Surfaces** palette (**Assign Custom Surfaces to 3D, Archit. Elements**)
- **Set project light** palette (**Set Project Light**)
- **Luminaire** palette (**Luminaire**)
- **Record movie** palette (**Record Movie**)

Close button in all palettes

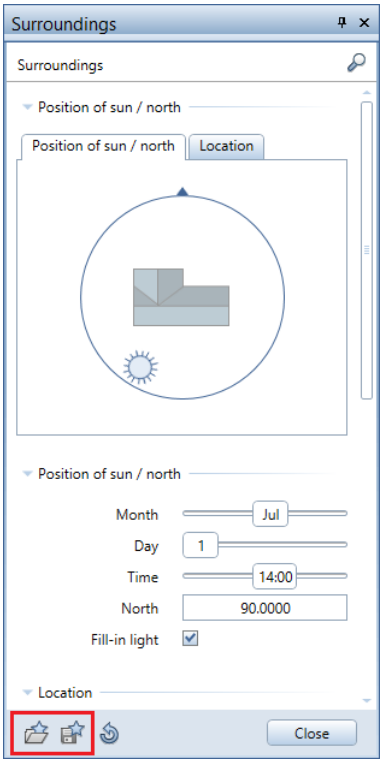
You can now find the **Close** button in all new animation palettes (for example, surroundings, surfaces, set project light, camera path and so on).



Favorite file in surroundings palette

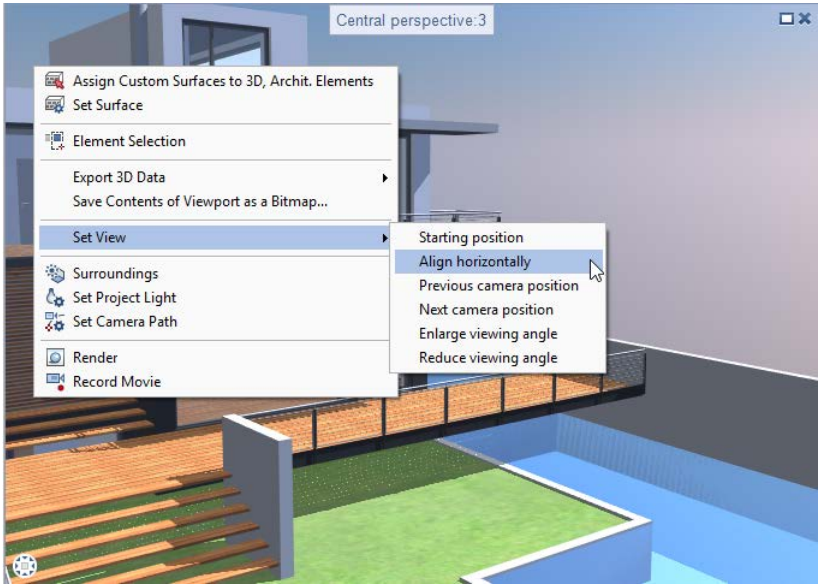
Click **Surroundings** to open the **Surroundings** palette. Here, you can define natural lighting (location, season, position of north, position of sun and so on), set a virtual ground plane and specify the background for animation and rendering.

In order to switch quickly between different settings for the scene, you can now use favorites in the **Surroundings** palette. With **Save as a favorite**, you can save all the settings as a favorite file in `*.envfa` format. To retrieve the settings, click **Load favorite**.



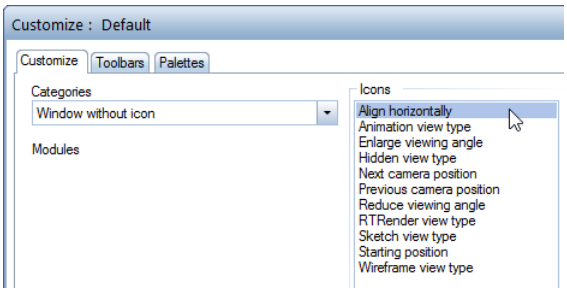
Align horizontally in all viewports

In earlier versions, you could horizontally align the camera in animation windows only. Now you can use **Align horizontally** with all view types. You can find this tool on the shortcut menu of the viewport. If you want, you can also define your own shortcut keys for this tool.



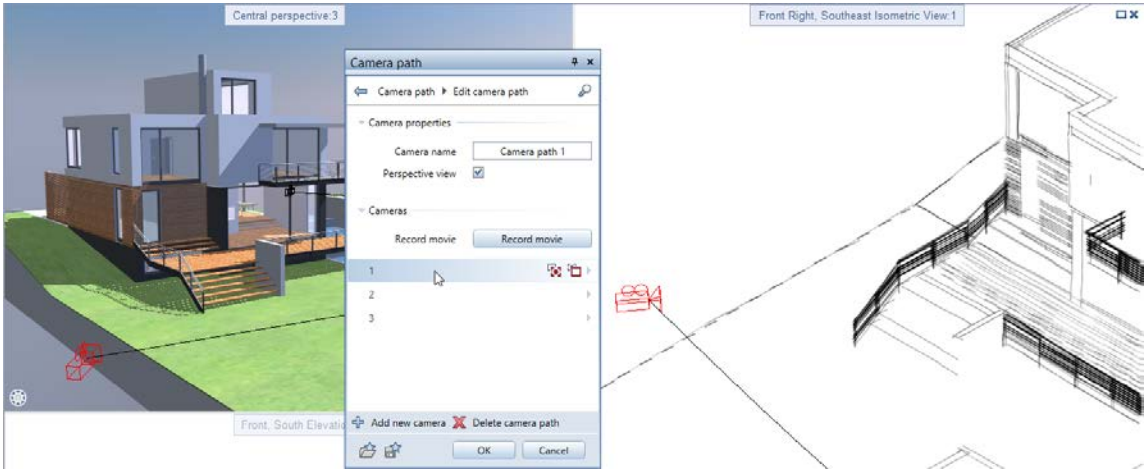
Shortcut keys for view types and camera positions

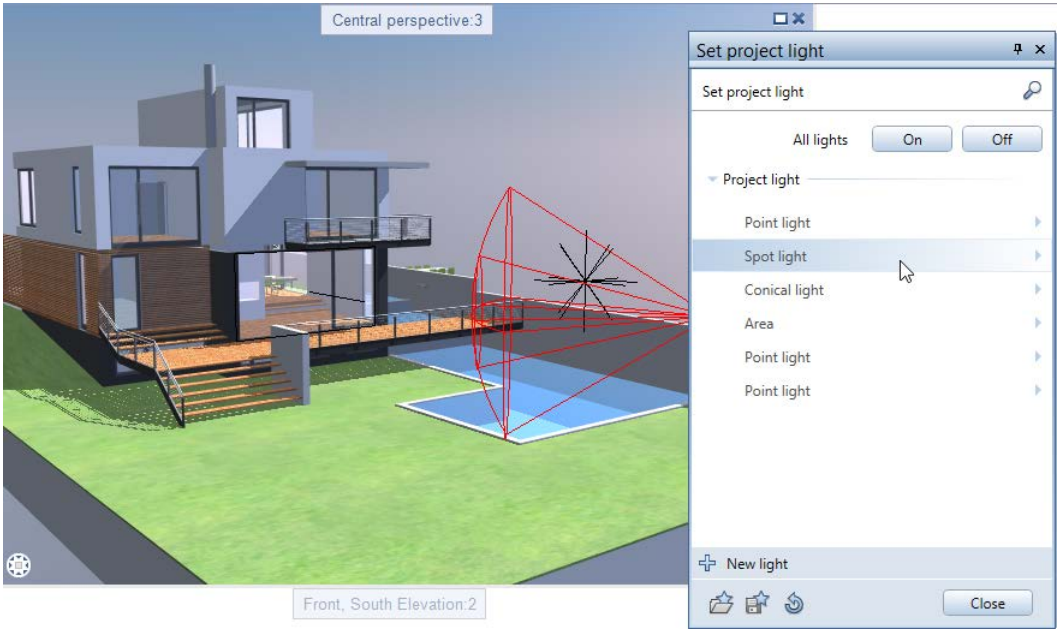
Click **Customize** on the **Tools** menu to define shortcut keys for view types and camera positions. Select the **Window without icon** category.



Camera path and light source

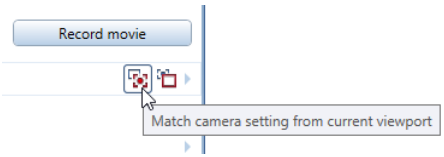
When you point to a camera path or light source in the palette, Allplan displays the camera or light in the **selection color** in the drawing or viewport. So you can immediately see the effects of changes.



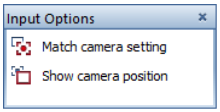


Defining and modifying cameras

When defining or modifying cameras, you can select the **Match camera setting from current viewport** and **Show camera position in current viewport** input options in the **Camera path** palette.

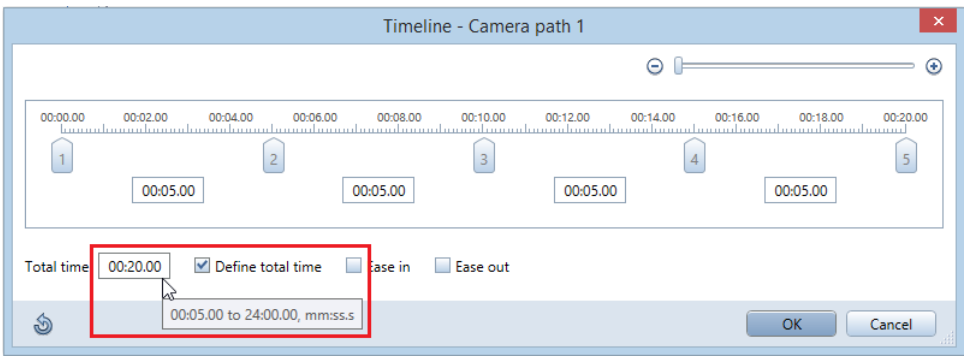


Now you can also find these input options in a toolbar, which you can place as you need.



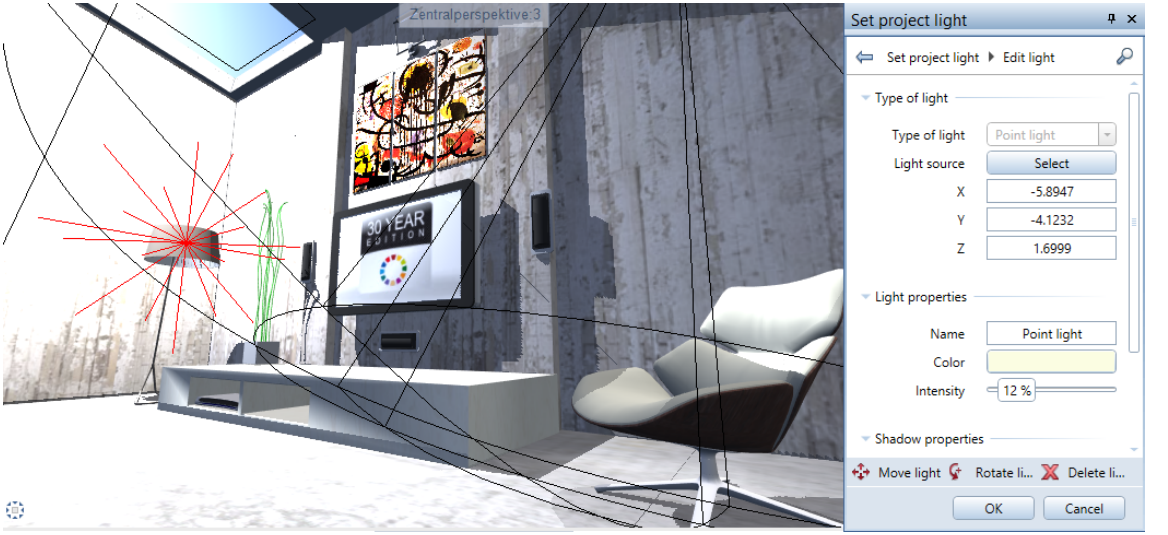
Timeline with new time format

In the timeline for **Set Camera Path**, you can now enter the time in minutes, seconds and centiseconds.



Changing light settings

Any changes you make in the **Set project light** palette are immediately visible in the viewport. You no longer have to close the palette.

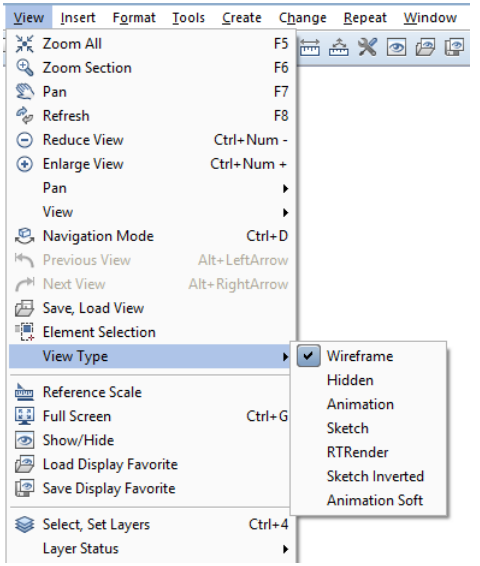


Light in scenes with background images

Fill-in light in the **Surroundings** palette has an effect on the **Physical sky** setting as well as on bitmaps or HDR images placed in the background. This produces better results in animation, in particular, with surfaces being illuminated indirectly.

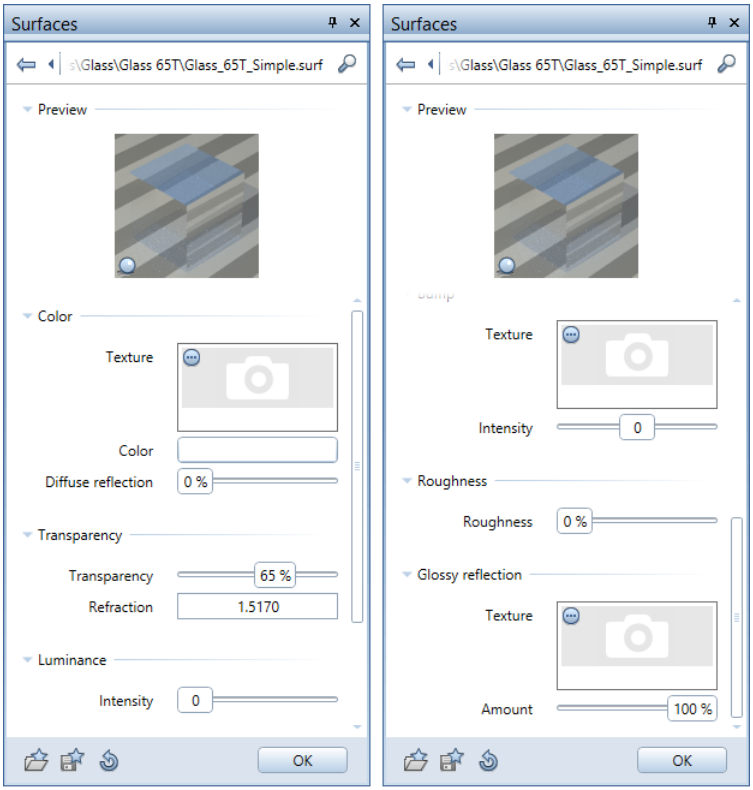
View menu includes view types

Using the **View** menu, you can now select all view types for the current viewport.



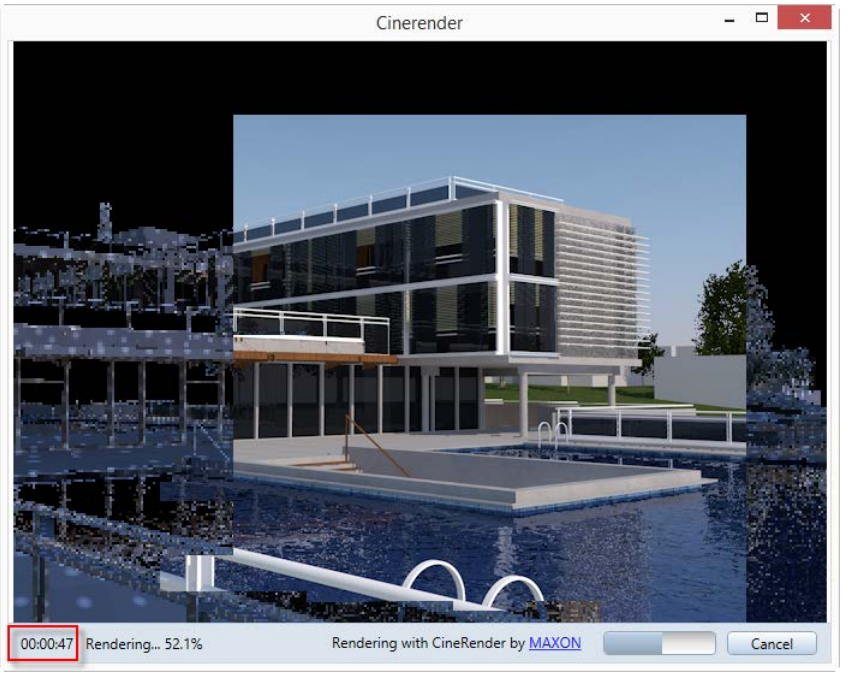
Preview of surfaces always visible

When you define a new surface using **Set Surface** or **Assign Custom Surfaces to 3D, Archit. Elements**, the preview of the new surface is always visible even when you scroll down. So you can immediately see the effects of changes. Allplan uses global illumination to render the preview.



Progress of rendering in Cinerender window

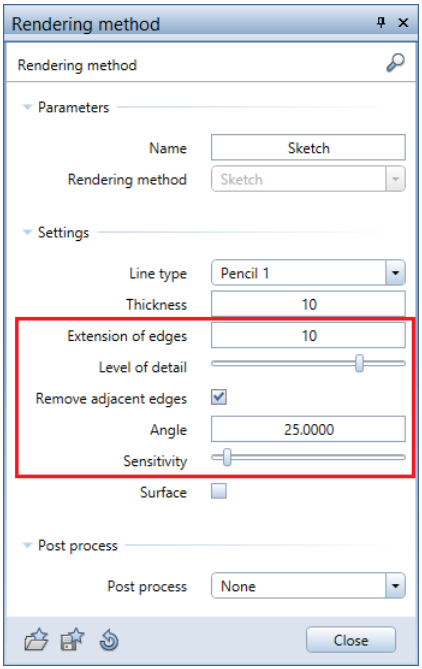
While you are rendering a scene or recording a movie, the **CineRender** window informs you of the time used so far, the current stage of the calculation and the rendering progress as a percentage. When rendering is complete, you can see the total time.



New features for the view types

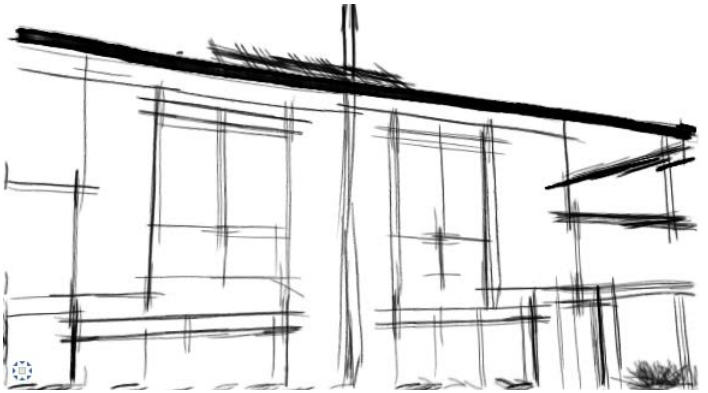
Sketch

You can find new settings in the palette of the **Sketch** view type.



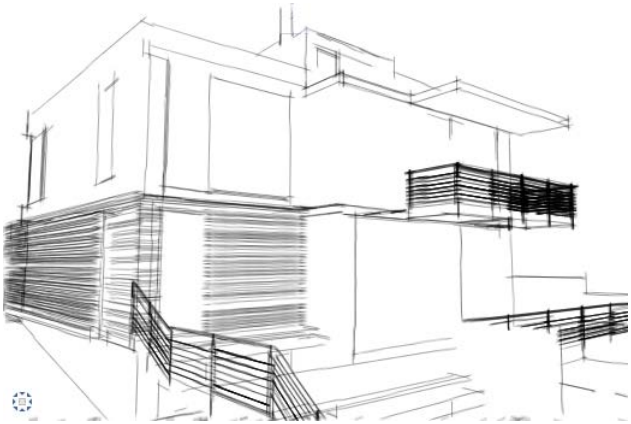
Extending edges

You can extend edges by entering a value in pixels, making the sketch look more natural.



Level of detail

You can adjust the visibility of edges using the level of detail. Here, you can use the slider to control the length of the edges in pixels.

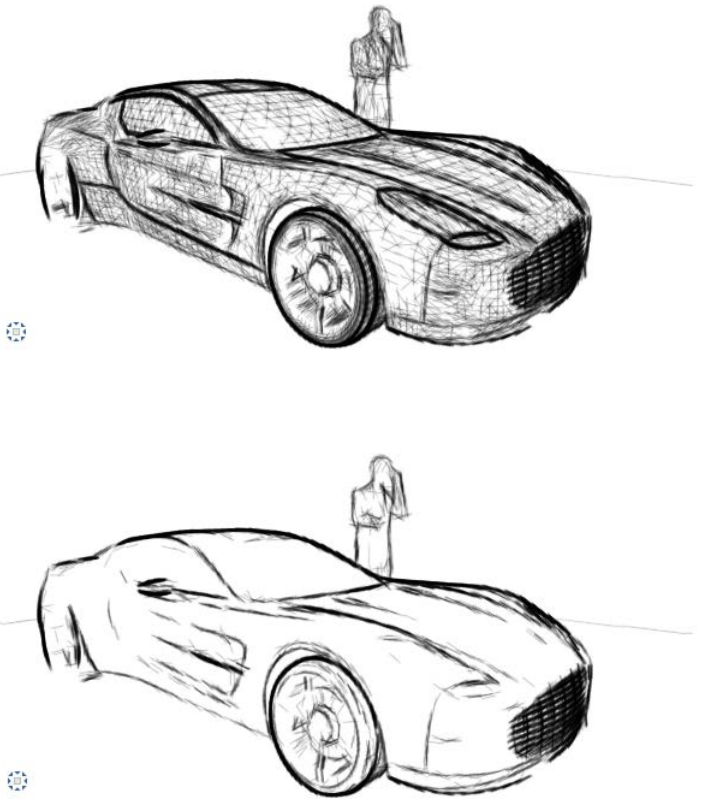


Removing edges

In **Sketch**, you can use the following settings to control how edges are displayed:

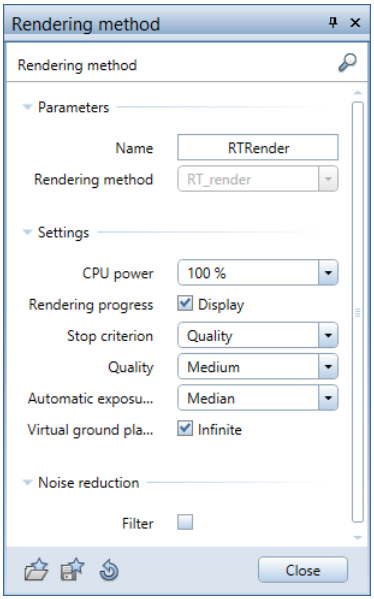
- **Remove adjacent edges - Angle** (same as in **Hidden Line Image**)
- **Sensitivity**

Using these settings, you can achieve realistic results in conjunction with curved surfaces divided into triangles.



RTRender

You can find new options in the palette of the **RTRender** view type.



Displaying rendering progress

If the **Display rendering progress** option is active, you can see the current status of the calculation at the bottom of the window.

CPU power

You can now set the **CPU power** for the **RTRender** view type, allowing you to adjust it to the hardware of your computer. During rendering, the remaining CPU power can be used by other applications. The settings that are actually available to you depend on the specific CPU.

Criteria for stopping

When you used the **RTRender** view type in earlier versions, Allplan continued calculating the image until you switched to a different view type or changed the view of the model. In the latter case, Allplan started to calculate the image again.

You can now stop the calculation according to specific criteria:

Frames

Specify the number of frames Allplan is to calculate. Allplan stops as soon as it has reached this number.

Time

Specify the total time of the calculation. Allplan stops as soon as the time specified has elapsed.

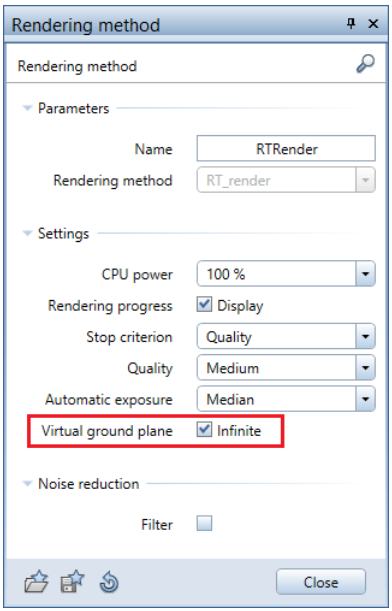
Quality based on noise reduction

Define the quality (low, medium, high, very high). Allplan stops as soon as it has reached the setting specified.

Infinite virtual ground plane

In earlier versions, the size of the model governed the size of the **Virtual ground plane**, which you can set in the **Surroundings** palette.

Now you can display an infinite virtual ground plane in conjunction with the **RTRender** view type:



Comparison of the resulting images:

Changes applied at once

If you change one of the following settings in the **RTRender** view type, Allplan will not start calculating the image again. Instead, Allplan simply continues calculating the image using the changed settings:

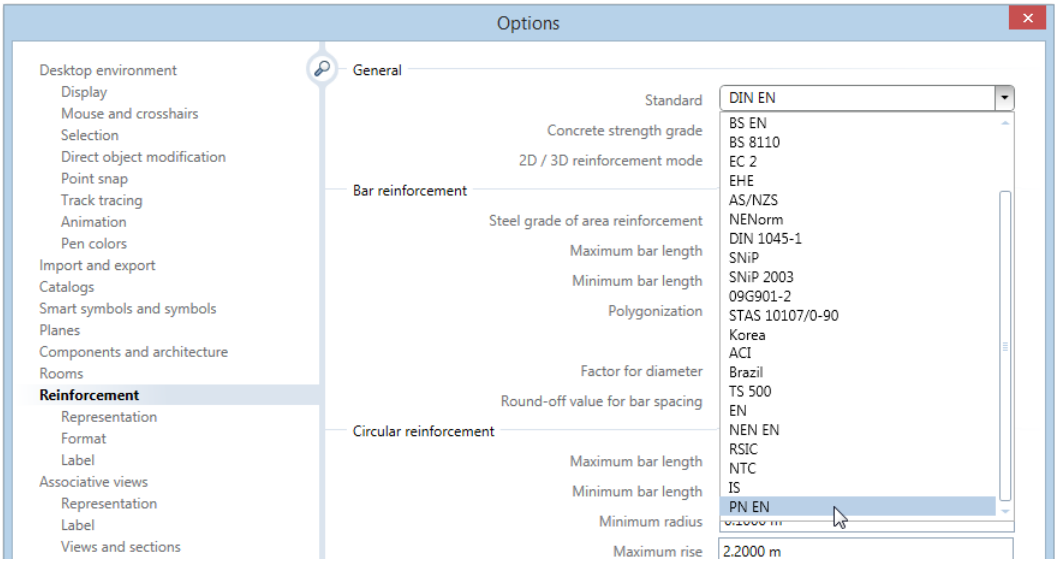
- **Exposure** (viewport toolbar)
- **Stop criterion**
- **Automatic exposure**
- **Noise reduction - Filter**

Engineering

BIM workflow

Applicable standard

After you have transferred data from Allplan to the FE programs for plates and discs of Nemetschek Frilo GmbH, these program start with the standard set in Allplan. Therefore, we added the Euronorm with the Polish appendix to Allplan. With this standard, you ensure Allplan automatically uses the appropriate default settings.

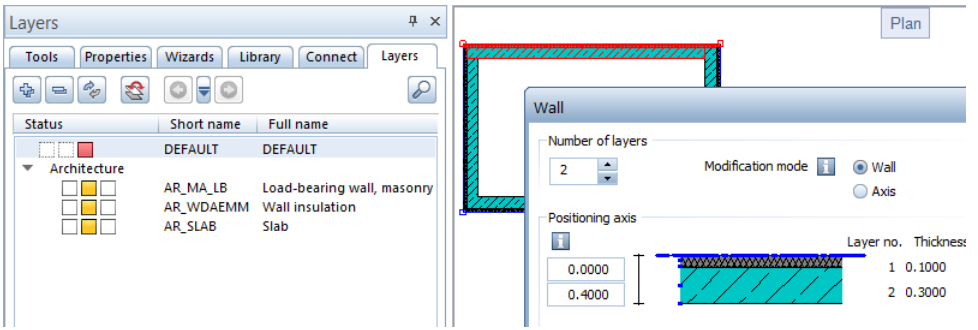


If you choose an Allplan standard that is not available to the FE programs, these programs will use Euronorm EN 1992.

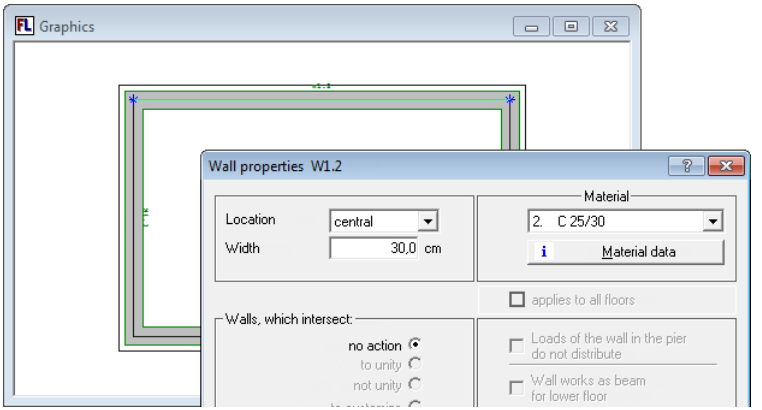
Multi-layer walls

Wall layers on hidden layers are no longer transferred to the FE programs. The position of the remaining wall layers in relation to the wall axis and the slab geometry stays the same.

For example: two-layer wall with exterior insulation:



Result in the FE program with the layer for the insulation being hidden:

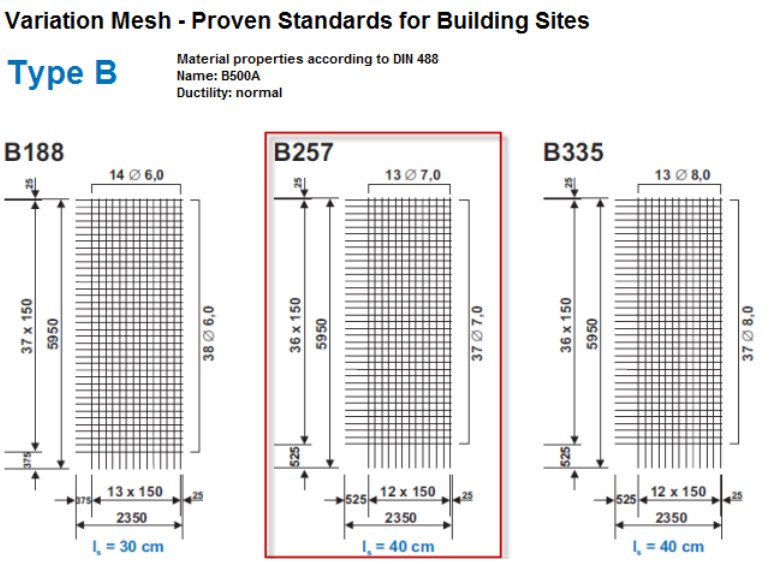


Localization

Cross-section catalogs

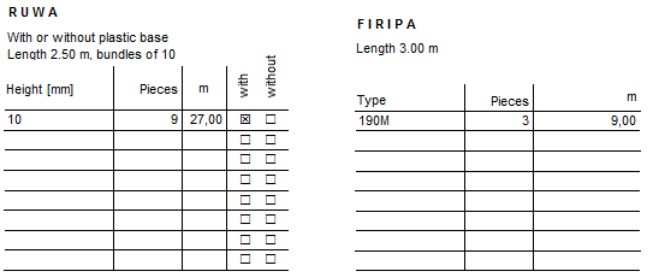
The cross-section catalogs for Germany, Austria, Slovakia and the Czech Republic now include the changed geometry of the **B257** variation mesh. In addition, we changed the name and steel grade of the highly ductile variation meshes in the German cross-section catalog. When you upgrade, Allplan copies the new cross-section catalogs to the `...Programs\Nemetschek\Allplan\New\Ing` folder, preventing data from being overwritten.

To use the new cross-section catalogs, open the overview of cross-section catalogs (**Tools** menu --> **Defaults** --> **Cross-section catalogs**) and import the `a***qusr.txt` file (in the `...Programs\Nemetschek\Allplan\New\Ing` folder) as a **Favorite**. If you work with project-specific bar and mesh cross-section catalogs and the new cross-section catalogs are in the office standard, you can switch the path setting for cross-section catalogs to **Office** and then back to **Project**.



Analyzing special cages

The Swiss mesh cutting diagram now analyzes the special RUWA and FIRIPA cages, which are defined as SmartParts. You no longer need to place them manually later.



RUWA

With or without plastic base
Length 2.50 m, bundles of 10

Height [mm]	Pieces	m	with	without
10	9	27,00	☒	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐
			☐	☐

FIRIPA

Length 3.00 m

Type	Pieces	m
190M	3	9,00

Index for placing in polygon

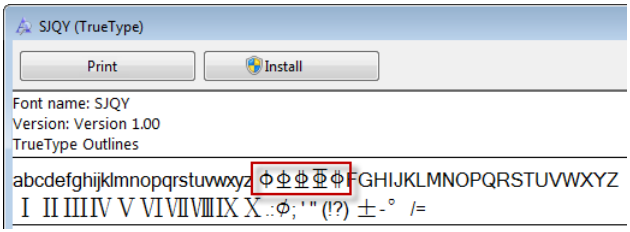
When you place in polygon, Allplan creates a mark number index. Depending on the requirements specific to your country, this index must use numbers or letters. Labels now take this into account even when you change the standard later.

More reports

You can now use the **Reinforcement schedule SANS 282.rdlc** report for construction projects in South Africa. This report lists all the bending shapes of the selected reinforcing bar marks and mesh marks according to the shape codes defined in the SOUTH AFRICAN NATIONAL STANDARD. A schema is displayed for the general bending shape 99.
This report has the same structure as the British Standard report. Segments and bar lengths are rounded off in accordance with the national standards.

Country-specific diameter symbols

China uses the **SJQY** TrueType font to display different steel grades with different diameter symbols. If you want to use this font in Allplan, you must install it as a system font.



Customer wishes

Labels for placements

When creating labels with **Dimension Line, Label**, you can now take the dimension line parameters from the wizard. When matching the properties of a label, Allplan also includes the setting for the leader end symbol.

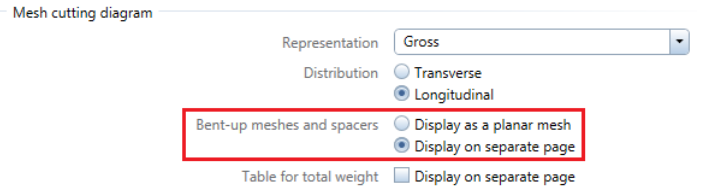
You can use the **Dimension line options** parameter to change the format properties of the dimension line. Allplan now considers these changes even if you do not change any other parameter.

Zoom factor for schemas

If you click bars or meshes placed in an associative view or section, Allplan now defines the zoom factor for the schema based on the zoom factor you defined in the x and y directions for the view or section.
The zoom factor is not taken into account for displaying bending shapes in reports and legends.

Bent-up meshes and spacers in mesh cutting diagrams

The **Options** include a setting defining how bent-up meshes and spacers are displayed in mesh cutting diagrams created by the **Mesh Reports** tool. This setting is now easier to understand.



- When you select **Display as a planar mesh**, the report displays bent-up meshes and spacers as planar meshes. They are listed consecutively with the other meshes.
- When you select **Display on separate page**, the report creates separate pages for bent-up meshes and spacers. Bent-up meshes are displayed with their bending shapes and spacers are listed in a table.

Note: This setting has no effect on bent-up meshes and spacers in mesh cutting diagrams created by the **Mesh Legend** tool. Here, Allplan always displays all elements as planar meshes.

Index

Allplan 2015

New Features in Allplan 2015

This documentation has been produced with the utmost care.

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Contents

Welcome!

Dear Sir or Madam,

Allplan is celebrating its 30th anniversary this year. Thirty years ago, Nemetschek began to turn the vision of integrated thinking into reality with its Allplan software. Since then, we have been working to build a bridge between the disciplines. Today, this method is known as Building Information Modeling. With the latest version of our BIM solution Allplan 2015, we are primarily aiming to develop an Allplan version you will beimpressed with!

In the area of visualization, for example, you benefit from a number of new rendering features - ranging from the Real Time Renderer to Maxon's CineRender engine integrated into Allplan to advanced export to CINEMA 4D. For improved visualization, we adjusted the window and door object modelers, and there is a new component, the domed roof-light. In addition, we improved inter-disciplinary teamwork and the digital sending of layouts with Allplan Exchange. In civil engineering planning or engineering structures, for example, you benefit from new features that improve efficiency, such as the new tools for creating sections along any curve or modeling tendons.

We wish you every success!

Nemetschek Allplan Systems GmbH

30 Years of Confidence in Allplan

We can look back proudly on 30 years' experience in the area of BIM software - and on the trust Allplan users place in our products. Thirty years ago, Nemetschek began to turn the vision of integrated thinking into reality with its Allplan software. Since then, we have been working to build a bridge between the disciplines. Today, this method is known as Building Information Modeling (BIM).

We would like to celebrate 30 years of Allplan with you and have put together a particularly attractive and innovative anniversary bundle: The Allplan 30 Year Edition.

The Allplan 30 Year Edition includes:

- The new 2015 version of the BIM solution Allplan
- Top quality object and material libraries
- Allplan 2015 IBD Planning Data Basic

Attractive objects and materials

The **Allplan 30 Year Edition** offers powerful, fully revised libraries with numerous new objects and materials for architects and engineers.

Materials

You can find top quality materials for CineRender in the **Surfaces library** in the **Office - 30YearEdition** folder. All you need to do is choose a tool where you can select a surface in SURF format, for example, **Assign Custom Surfaces to 3D, Archit. Elements.**

Find out how easy it is to create realistic surfaces with bump maps!

Sky

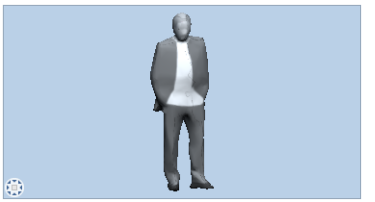
Using **Surroundings**, you can select **Custom** textures for the sky in the **Background**. Click the button beside texture to select from a wide range of HDRI skies for CineRender. You can find these skies in the **Office - 30YearEdition** folder. In order to achieve the best results with these sky textures, set **Mapping** to **Sphere**.

Smart symbols

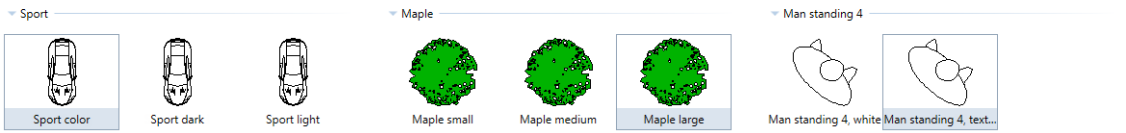
You can find new objects in the **30YearEdition Cars**, **30YearEdition Trees** and **30YearEdition Persons** folders in the **Default** path of the **Smart symbols** library. The persons can have texture maps of the UV type.

Dimensions 2,129 x 4,802 x 1,365

Dimensions 8,236 x 8,391 x 9,644

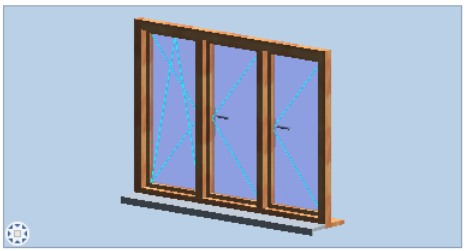


Dimensions 0,559 x 0,62 x 1,876

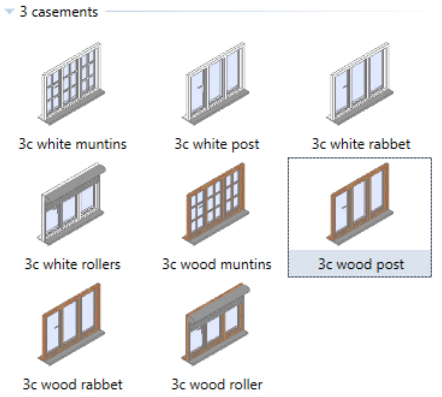


SmartParts

The **SmartParts** library includes the **30YearEdition Finish** folder in the **Default** path. There you can find a wide range of new SmartParts for windows and doors, domed roof-lights, roof accessories (chimneys, lightning conductors, ...) and for industrial construction (rows of lights, doors, cranes, ...).



Dimensions 1,8 x 0,768 x 1,33



Presentation

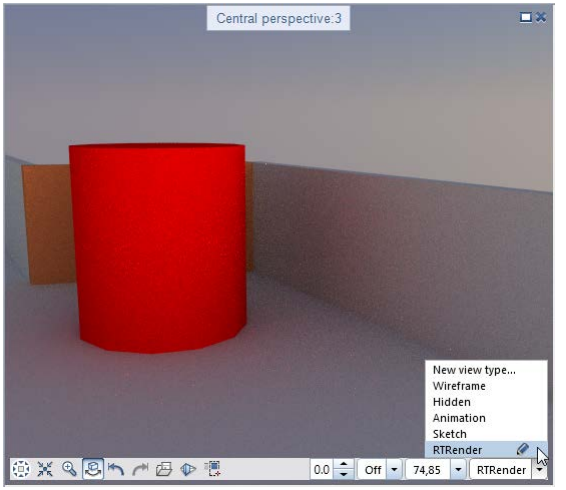
One of architects' core tasks is to bring to life their architectural visions with atmospheric and realistic presentations for the building client. Engineers need to provide building clients, planning partners or authorities with professional presentations. With the new functionalities of the Real Time Renderer and the CINEMA 4D render engine integrated in Allplan, you can perform this task from the 3D model with just a few clicks. Even without in-depth expertise in this area, you can therefore create attractive presentations very quickly.

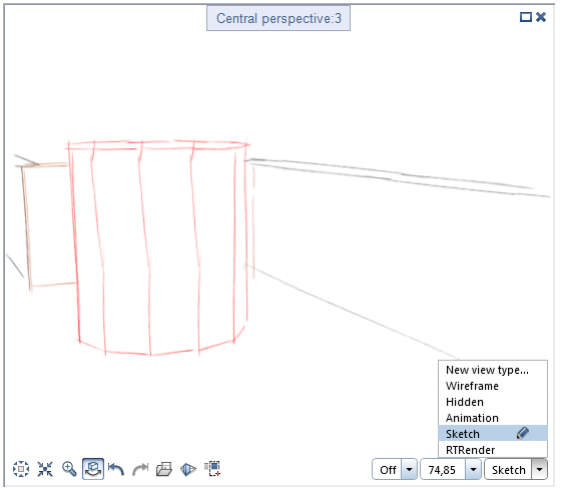
With the Real Time Renderer, you can create a realistic, interactive animation of the building model in just a few seconds. You therefore have immediate visual feedback and can check various views, camera settings and materials. In this way, you can select the best possible scene setup. In the render materials, you set uneven surfaces (bump maps), reflections or luminous objects and therefore achieve a high level of detail.

Exterior renderings look even more realistic, thanks to the new physical sky. With the support of high dynamic range images (HDRI), even large differences in brightness can be reproduced in detail. You can create high-resolution renderings with the help of the extremely powerful CINEMA 4D render engine, integrated in Allplan for the first time in this version. The work previously needed to synchronize the models in Allplan and CINEMA 4D is thus no longer necessary.

One viewport - different view types

Using the viewport toolbar, you can switch between the different view types and render types.



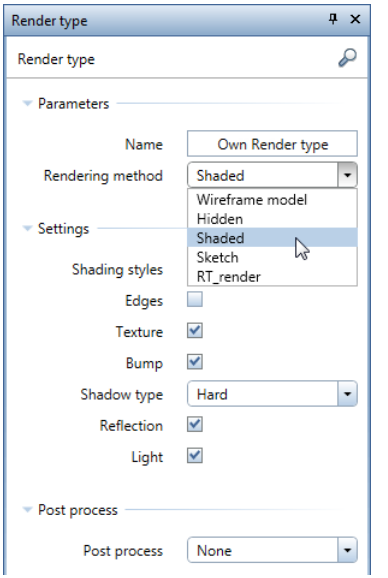


You can choose from the following predefined view types:

- **Wireframe**
- **Hidden**
- **Animation**
- **Sketch**
- **R**(eal)**T**(ime)**Render**

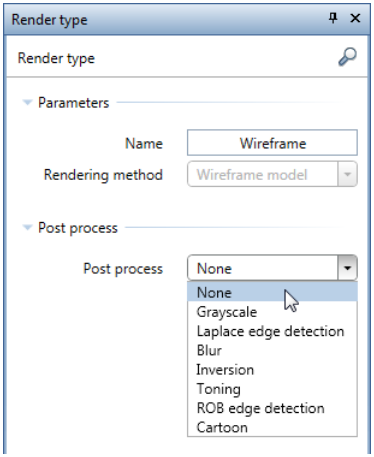
Click  to change the predefined view types in palettes. You can also restore the default settings, but you cannot delete the predefined view types.

If you want, you can define your own view types. Click **New view type...** and select a predefined render type in the palette. Enter a name for the new view type and define the settings.



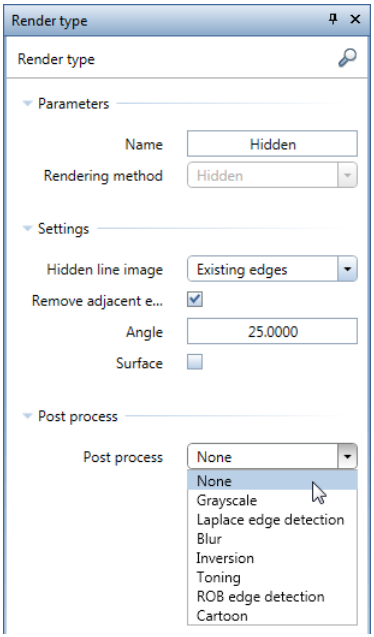
Wireframe view type

You can change the following parameters for the **Wireframe** view type:



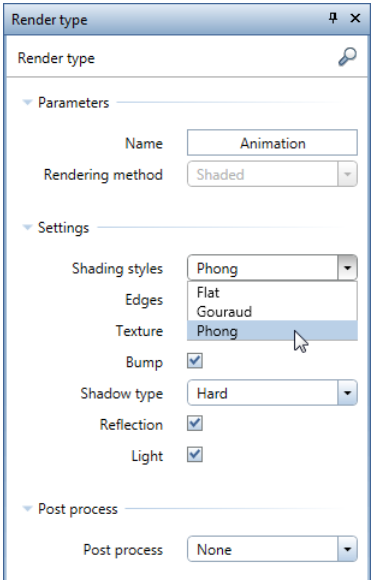
Hidden view type

You can change the following parameters for the **Hidden** view type:



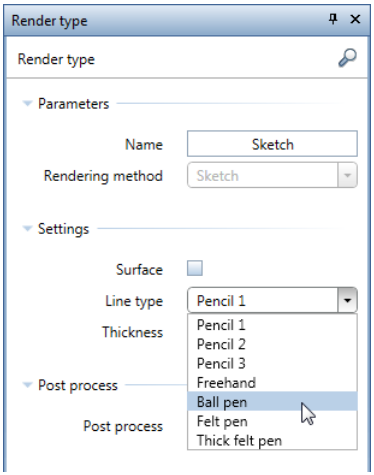
Animation view type

You can change the following parameters for the **Animation** view type:



Sketch view type

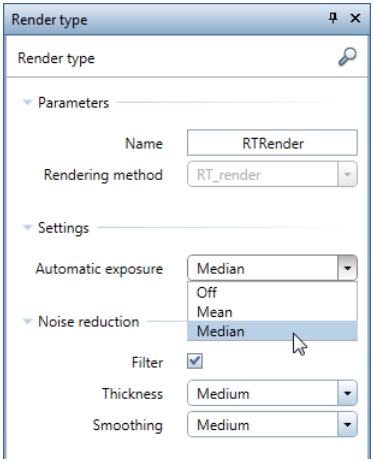
You can change the following parameters for the **Sketch** view type:



You can customize sketches for your needs by selecting different pens - from pencil to ball pen to thick felt pen - of varying thickness.

RTRender view type

You can change the following parameters for the **RealTime Render** view type:



You can change or switch off **automatic exposure**. In addition, you can filter and suppress noise.

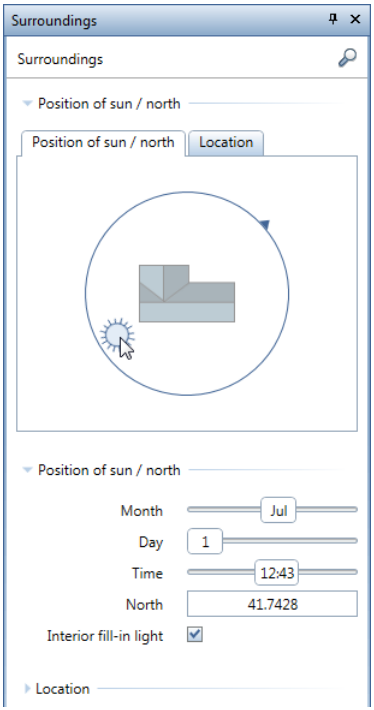
Improved surroundings

Using **Surroundings** on the shortcut menu in navigation mode, you can now set the parameters for the natural surroundings of your scene globally and comprehensively.

Position of sun / north

You can define the position intuitively in the graphics using the mouse or you can enter exact values in the boxes below.

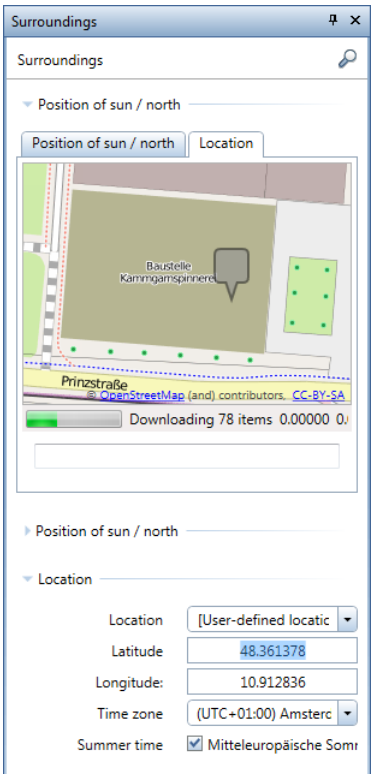
You can add a fill-in light for interiors.



Location

If you want, you can now define the location in a map. You can even select the street and the number - all you need to do is zoom in on the location. Once you have found it, double-click to select it.

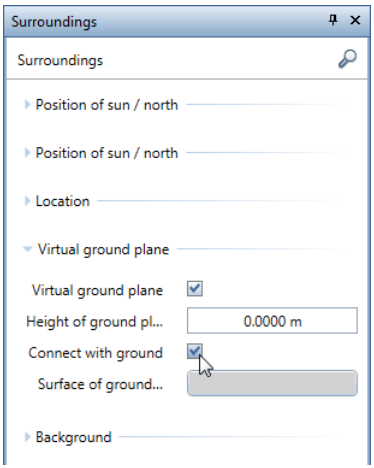
Of course, you can still enter the latitude and longitude as usual.



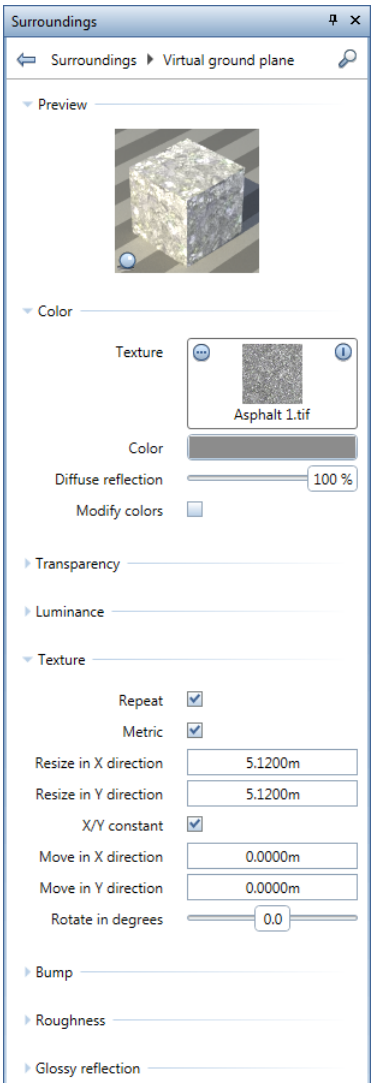
Virtual ground plane

Thanks to the new **virtual ground plane**, you no longer need to create auxiliary structures, such as colored or texturized floor slabs.

All you need to do is enter the height of the ground plane in meters. If you select the **Connect with ground** option, the ground plane will automatically adjust to the bottom of the component.

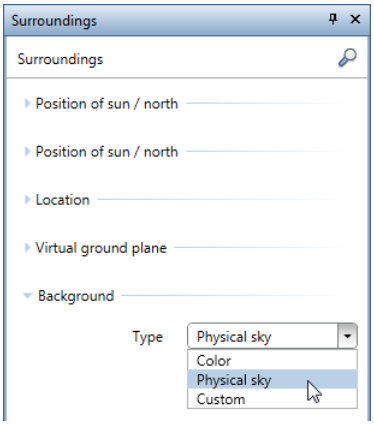


You can customize the surface of the**virtual ground plane** for your needs - from fills to textures.

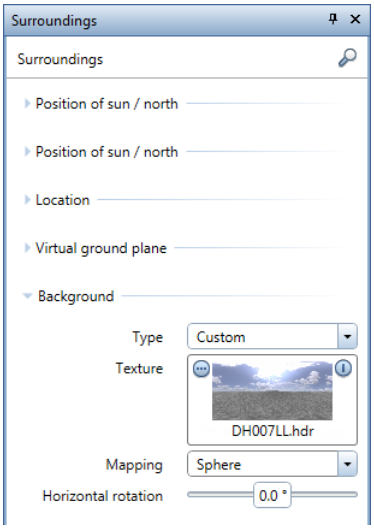


Background

Apart from a background color, you can now use the physical sky for the background. The physical sky automatically adapts to the place and time, making it easier for you to create scenes at nighttime.



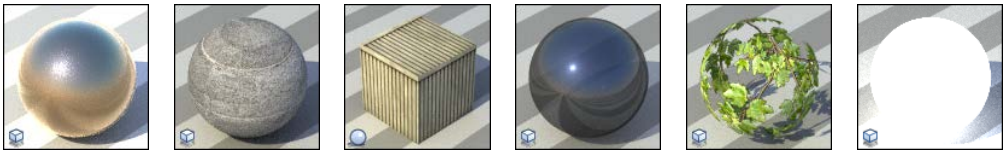
The **Custom** setting lets you select a texture or bitmap for the background of the scene. So you can now map a sky texture onto a sphere.



Advanced settings for surfaces

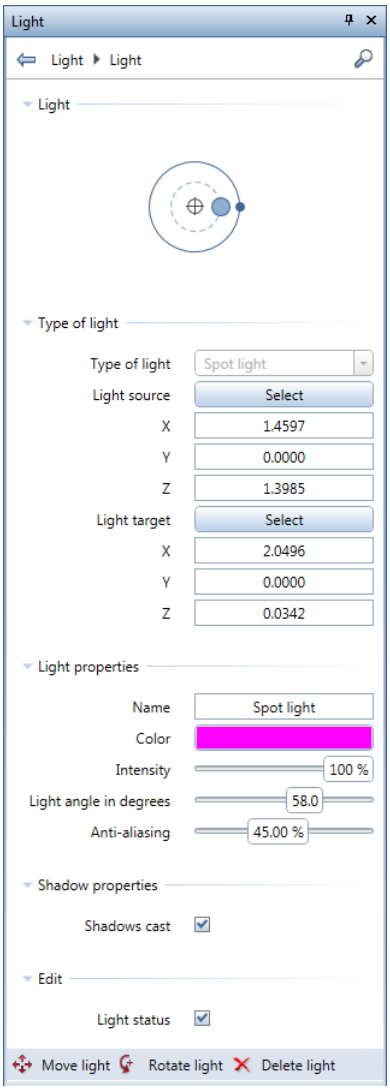
You now have advanced options for setting surfaces.

- Physically accurate material channels
  - Alpha channel
  - Luminosity
  - Bump
  - Roughness
  - Reflection map
  - The preview can be a cube or a sphere. Click the icon at bottom left to switch between these two types.

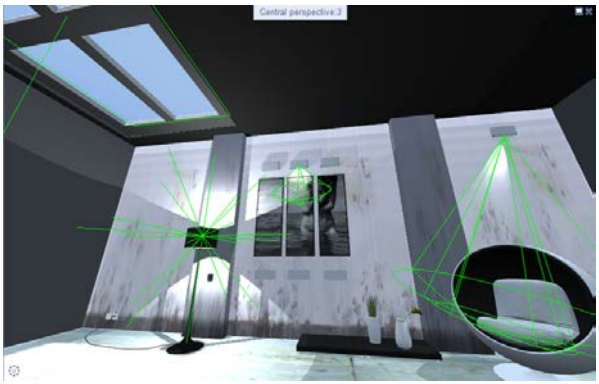


Advanced and improved lights

You now have advanced options for setting lights. In addition to plan view, you can now place lights in any view. You can select the **Set Light for Project** tool on the shortcut menu in navigation mode.



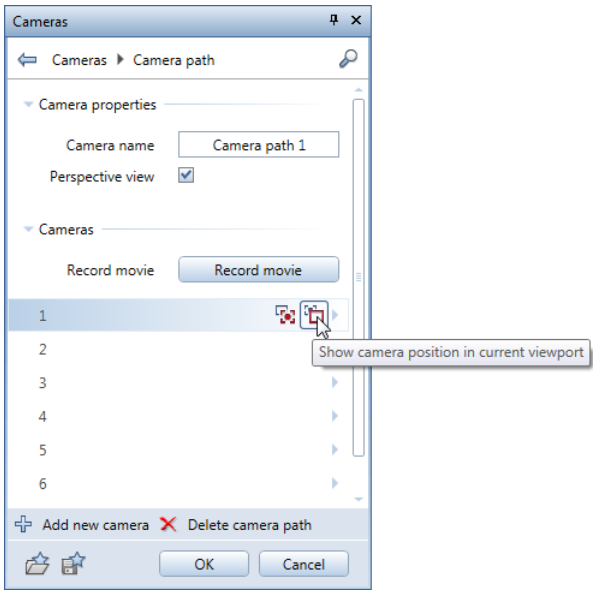
- New light sources, for example, diffuse light
- Real spots; the intensity of this light drops the further away from the point it is.
- Easy-to-use palettes
- New parameters
- The program adjusts the lighting of a scene in real time.



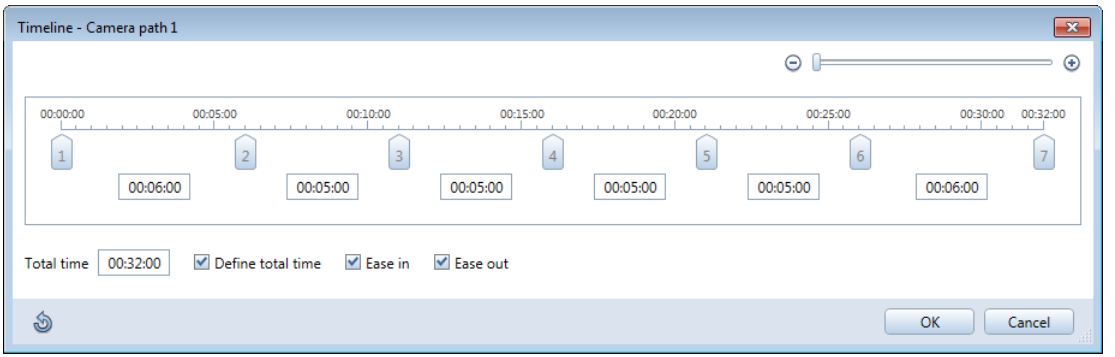
Cameras and movies

We improved **Set Camera Path** and **Record Movie** in several places. So you can now place cameras and record movies quickly and easily, allowing you to work more intuitively.

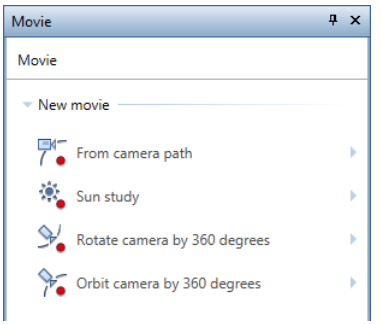
- For example, you can now define camera paths in any view. Here, too, you can take each step intuitively - whether you define or modify a camera path.



- When it comes to running movies, you no longer need to enter the number of steps between two cameras. Instead, you can now use a time bar.



- In animation mode, the program records movies in real time. You can even save the bitmaps separately.
- Allplan provides new default settings for camera paths when you record movies:
  - **From camera path** - the camera moves along the camera positions you defined beforehand.
  - **Sun study** - the sun moves over the fixed model.
  - **Rotate camera by 360 degrees** - the stationary camera turns by 360 degrees.
  - **Orbit camera by 360 degrees** - camera moves around the model.

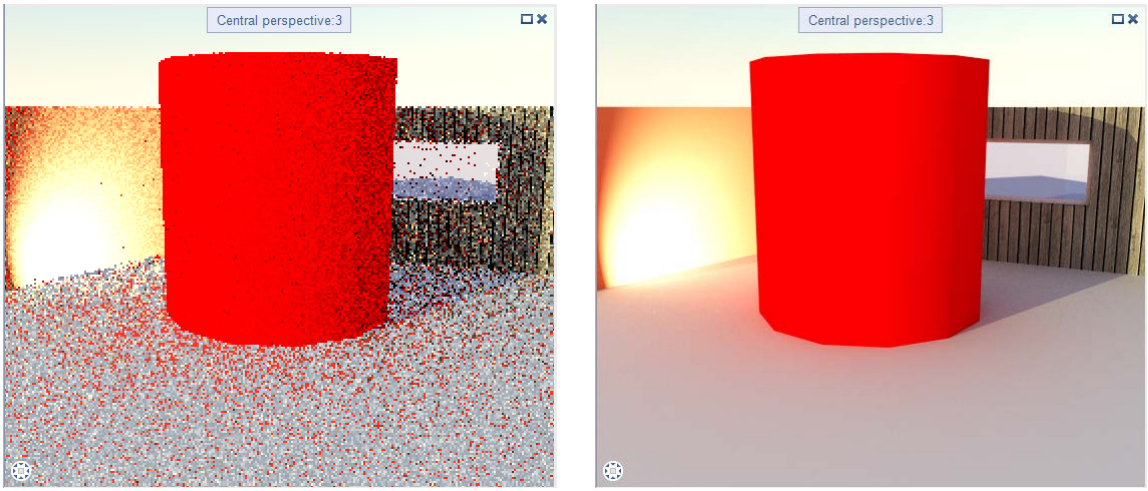


Interactive rendering in real time

Interactive rendering in real time is the future of GI rendering:

- Photo-realistic
- Undistorted
- Physically accurate renderer
- Interactive renderer reacting in real time to changes in
  - Cameras
  - Lights and surroundings
  - Materials
  - Allplan initializes the scene almost immediately.
  - Rendering is straight in the viewport.
- Adaptable
  - Automatic exposure
  - Adaptable noise filter (based on Wavelet Denoise method)

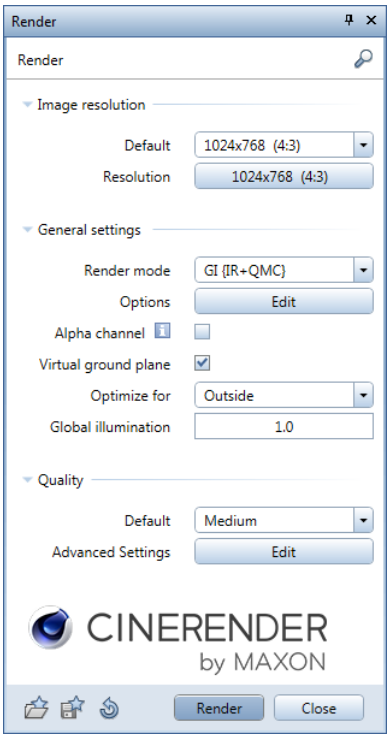
Use RealTime renderer for interactive rendering. Open the palette and place it beside the viewport. Whenever you change a parameter, Allplan starts calculating the image again. The first result is immediately visible. However, Allplan does not stop calculating the image. The longer you do not change anything, the better the result.



Result immediately after calculation has started and after ten seconds

CINEMA 4D GI Renderer

In order to achieve rendered images of highest quality, you can now use CINEMA 4D's render engine directly in Allplan.



- Photo-realistic CINEMA 4D render engine for the most demanding images
  - Straight in Allplan
  - A sky for day and night
- Rendering is in the background
  - You can start to render and resume your work immediately
- Easy to use
  - You can choose from a wide range of quality defaults
  - You can filter properties

- Alpha channel rendering
  - Surroundings in alpha channel
- Improved export to CINEMA 4D
  - Lights and materials
  - Surroundings - physical sky, HDRI
  - Virtual ground plane

Tip: Look in the help -> "Presentation" -> "Animation module" for detailed and further information on the wide range of options provided by the CINEMA 4D render engine.

How to find everything

Some tools have changed places in the Animation module and some tools are no longer available.

This overview helps you find your way around.

Earlier versions	Allplan 2015
Create menu	
Light settings, sun	You can define these settings together with location, position of north and time in  **Surroundings**.
Background color, texture	 **Surroundings**
Run movie along camera path	 **Record Movie - From camera path** If you have not specified a name for an AVI movie, Allplan will run the movie without saving it.
Sun study	 **Record Movie - Sun study** Easier to use
Open, Convert Show	This tool is no longer available. You can now save the scenes separately as bitmaps using the  **Record Movie** tool. In order to do this, go to the **AVI movie** area and select the **Keep images** option. As movies now run in real time, you no longer need a separate tool for slide shows.

Edit menu

Animation options	Open the **Options**, select **Desktop environment** and open the **Animation** page. The shortcut to the defaults in the animation options is no longer available.
Light settings	Use **Surroundings** to set sunlight. You choose from a wide range of parameters, such as location, position of sun, time and season. Use **Set Light for Project** to define custom lights. You can do this in any view. Here, you can also switch the custom lights on and off. Camera light, corner lights and ambient light are no longer available, but you can now select a diffuse light source.
Export to CINEMA 4D, VRML, DAE, KMZ, 3DS, U3D ...	In order to export data to CINEMA 4D, you can now use the **Send to CINEMA 4D** tool. In order to export data to the other formats, switch to **Navigation Mode (viewport toolbar)** in a viewport. If you want, you can also select the **Animation** view type. Open the shortcut menu, point to **Export 3D Data** and select the **Export to VRML, DAE, KMZ, 3DS, U3D** tool.

Shortcut menu in animation window	You can now find this shortcut menu in all viewports. All you need to do is switch to  **Navigation Mode (viewport toolbar)**. Look in Allplan's help for detailed information. Refer to the section "Shortcut menu in navigation mode".
Animation window properties	This tool is no longer available. You can find some of its settings when you modify the view type.
Save, Load Movie Model	This tool is no longer available.
Camera Rotation	 **Record Movie** -  **Orbit camera by 360 degrees**
Reset All Settings	This tool is no longer available. You can use  to restore the defaults for  **Set Camera Path**  **Set Light for Project**  **Set Surface** All settings of the **Animation** render type

More new features for recording movies

 **Rotate camera by 360 degrees**
The camera stays in the same place and rotates by 360 degrees.

 **Orbit camera by 360 degrees**
The camera moves on a circular path around the model; it always focuses on the center of the model.

New feature for rendering

After having rendered an image, you can adjust **Color saturation**, **Brightness** and **Contrast** as usual. In addition, you can save the image in a common bitmap format. The window with the rendered image stays open until you close it. So you can try out different settings and save intermediate results.

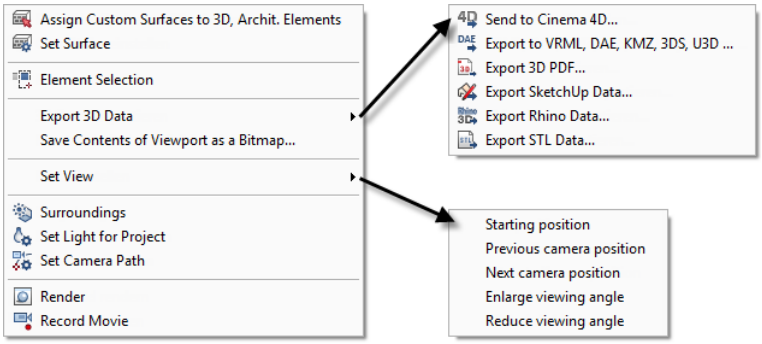
If you want to edit the image in Allplan later, you can use the  **Edit Bitmap** tool (**File** menu).

Shortcut menu in navigation mode

In earlier versions, you could open a shortcut menu with the most important animation tools straight from the animation window.

You can now find this shortcut menu in all viewports. All you need to do is switch to **Navigation Mode (viewport toolbar)**.

Using the tools on this shortcut menu, you can modify and manipulate the scene without having to select other tools or switching navigation mode off.



Initial situation:

- Navigation mode on
- Cursor in viewport

Defining new shortcut keys for "Set view"

In earlier versions, you could **Set views** using the shortcut menu in the animation window.

You can still find most of these views on the shortcut menu. In addition, you can now define shortcut keys for these views. You can then use the keyboard to set these views in viewports with the **Animation** view type. You certainly know some of the predefined shortcut keys from earlier versions.

- **Starting position** - ALT+POS1
- **Previous camera position** - PAGE UP
- **Next camera position** - PAGE DOWN
- **Enlarge viewing angle**
- **Reduce viewing angle**

Note: As you can define several camera paths for a single project in Allplan 2015, **Starting position**, **Previous camera position** and **Next camera position** always apply to the current camera path. Consequently, they have an effect only if you have defined a camera path.

To define shortcut keys for the ”Set view” functions

1 On the **Tools** menu, click **Customize** and select the **Customize** tab.

2 Select the **Window without icon** category.

3 In the **Icons** area, select a tool, such as **Enlarge viewing angle**.

4 Click in the box below **New shortcut key**.

5 Press the required keys, such as ALT++.

6 Click **Assign>>**.

7 Repeat steps 3 to 6 to define more shortcut keys.

8 Click **Save** to save the configuration.

Visualization and graphics card

Depending on the graphics card, you may not be able to use all new features in the area of visualization. To fully exploit these benefits, you require a professional graphics card with at least 1 GB of memory. In addition, the graphics card must support OpenGL 3.5. We recommend OpenGL 4.2 for future versions of Allplan.

Allplan automatically switches to GDI in the following cases:

- The memory of the graphics card is less than 1 GB.
- DirectX 10.0 graphics cards with older drivers (2009 or earlier); you can solve this problem by updating the driver.
- DirectX 9 graphics cards or earlier
- Intel chipsets

In any case, GDI ensures that you can work productively in Allplan. However, graphics may be a bit slower.

Open GL in comparison with GDI

View type	Open GL 3.5	GDI
Wireframe view type (design)	Yes	Yes
Animation view type (default, design check)	Yes	Yes
Animation view type (advanced, with shadows and material channels)	Yes	No
Hidden view type (default)	Yes	Yes (new in Allplan 2015)
Hidden view type (advanced, with shadows and edge detection)	Yes	No
Sketch view type (new in Allplan 2015)	Yes	No
RT Renderer view type (new in Allplan 2015)	Yes	No
CINEMA Renderer (new in Allplan 2015) for rendering images	Yes	Yes

Recommendations for graphics card / 32-bit version no longer available

To fully exploit the benefits of the new visualization features in Allplan 2015, you require a graphics card with at least 1 GB of memory. Please note that Allplan 2015 is only available for Windows 64-bit systems.

New features for shadows

Tools shared by animation and shadow

You can now find the **Surroundings** tool and the **Set Surface** tool in both the Animation module and the Shadow module. When calculating photos, the program does not use all the parameters set.

Date, position of sun, position of north, location

In earlier versions, you used the **Photo** tool to set the sun. Now you use the **Surroundings** tool, which you can also find in animation. All settings defined in animation are also visible in the Shadow module; here, however, the program only takes into account the settings for the **Position of sun**, **Position of north** and **Location**.

If you want to integrate the sun in photos, open the **Photo** tool and select the **Match position of sun** option. **Photo for Sun Study** also takes into account the settings for the **Date**, **Position of north** and **Location**.

In earlier versions of **Allplan**, both modules used the same dialog box for the sun. You could use the settings across modules.

Surfaces and element colors

The Shadow module no longer includes the **Define Surface Colors** tool. Instead, use the **Set Surface** tool, which you can also find in animation. All settings defined in animation are also visible in the Shadow module; here, however, the program only takes into account the surfaces assigned to the element colors.

Earlier versions of **Allplan** provided two tools for this task. SURF-format surface files for basic colors were interchangeable and both tools could import them.

Windows and doors

Windows and doors are key design elements in the architectural design. They are central in determining a building's appearance. At the same time, managing these components involves a high degree of planning during the design process. The solution: parametric object modelers combine maximum design flexibility with comprehensive and reliable analyses in door and window reports.

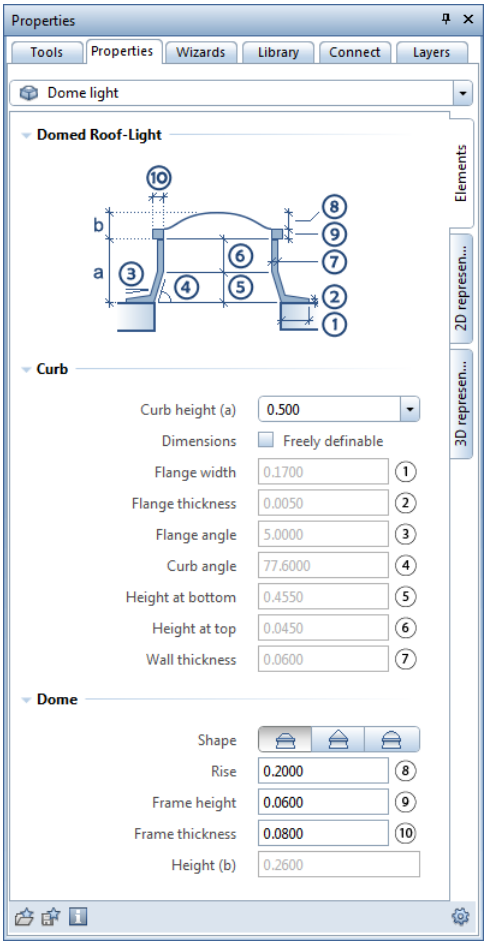
For Allplan 2015 Architecture, we added the new domed roof-lightcomponent to the range of doors, windows and facades. You can insert these domed roof-lights in horizontal openings in slabs or in roof openings. You place them using palettes and handles. Their correct display in floor plans and analyses in reports are naturally a given. With the new component type, it now takes just a fraction of the time previously needed to plan domed roof-lights.

We also improved the existing windows and doors in numerousrespects.

SmartParts

The **Basic: Walls, Openings, Components** module, **Create** area, includes a new tool you can use to model SmartParts: the **Domed Roof-Light SmartPart** tool.

After you have selected this new tool, the **Properties** palette of the **Domed Roof-Light** SmartPart opens on the **Elements** tab. You can immediately start modeling your own SmartPart.



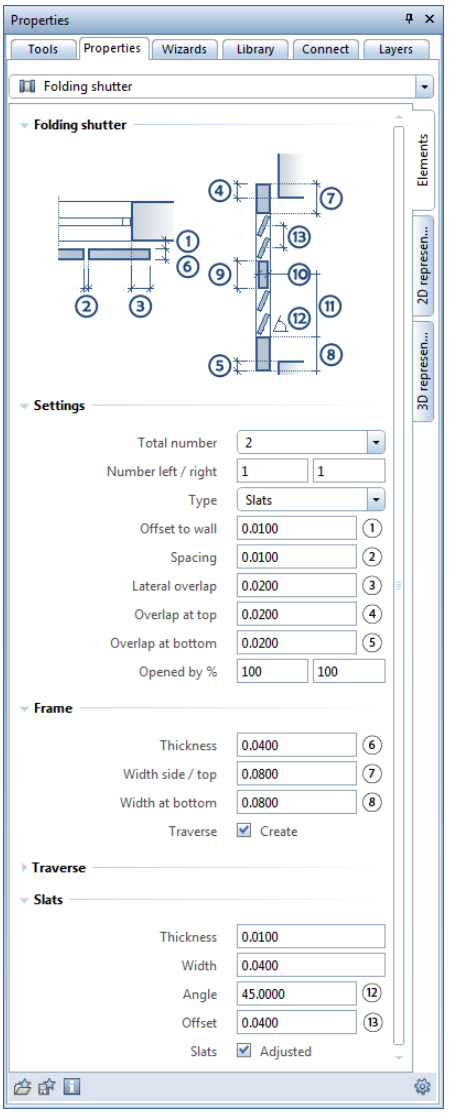
You can insert domed roof-light SmartParts in rectangular openings in slabs and flat roofs. Like any other SmartPart, **Domed Roof-Light** SmartParts can be modified graphically using handles. Of course, you can also change the parameters in the palette.

You can save your SmartParts as favorite files using **Save as a favorite**. You can also add them to the library.

You can also find the **Domed Roof-Light SmartPart** tool in the **General: Roofs, Planes, Sections** module in the **Create** area.

New Shading SmartPart

The **Shading SmartPart** tool (**Basic: Walls, Openings, Components** module, **Create** area) includes a new SmartPart: **Folding Shutters.**



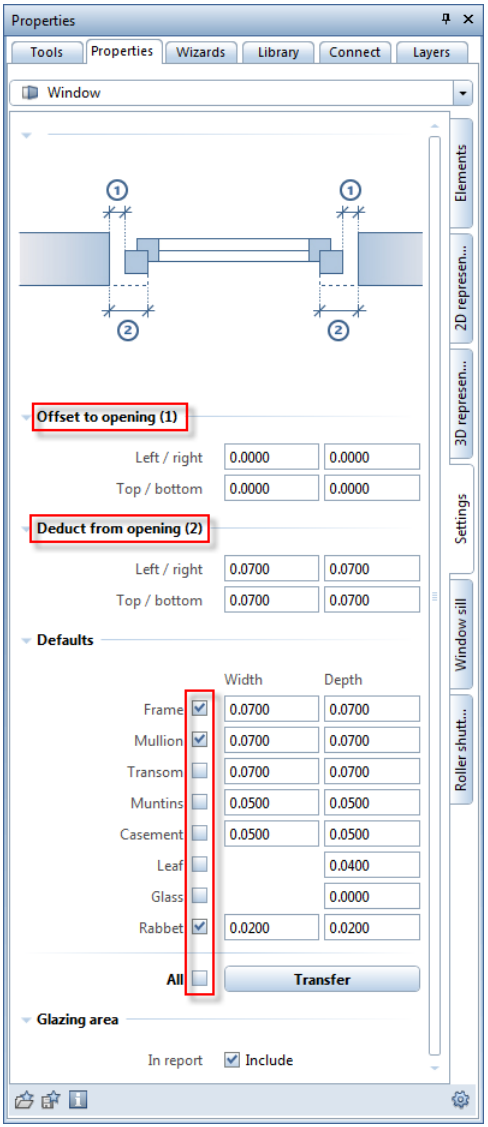
You can analyze SmartParts for **Folding Shutters** using the  **Reports** tool, `Shading.rdlc` and `Roller shutters.rdlc` reports.

New parameters for window SmartParts and door SmartParts

The  **Window SmartPart** and  **Door SmartPart** tools provide a number of additional parameters.

When creating a **Window SmartPart** or a **Door SmartPart**, you can now enter values for the SmartPart's **Offset to opening (left, right, top, bottom)** on the **Settings** tab. You can analyze these SmartParts using the  **Reports** tool. Open the **Finish** folder and the **Windows, Doors** subfolder and choose the new `Window offset.rdlc` report.
In addition, you can control the clear width of a window SmartPart or a door SmartPart by entering values in the **Deduct from opening** area.

In the **Default** area, you can now select individual elements of the SmartPart in order to apply the defaults or the values you defined yourself. All you need to do is click the **Transfer** button.
If you select **All**, the program uses the defaults for all the elements of the SmartPart.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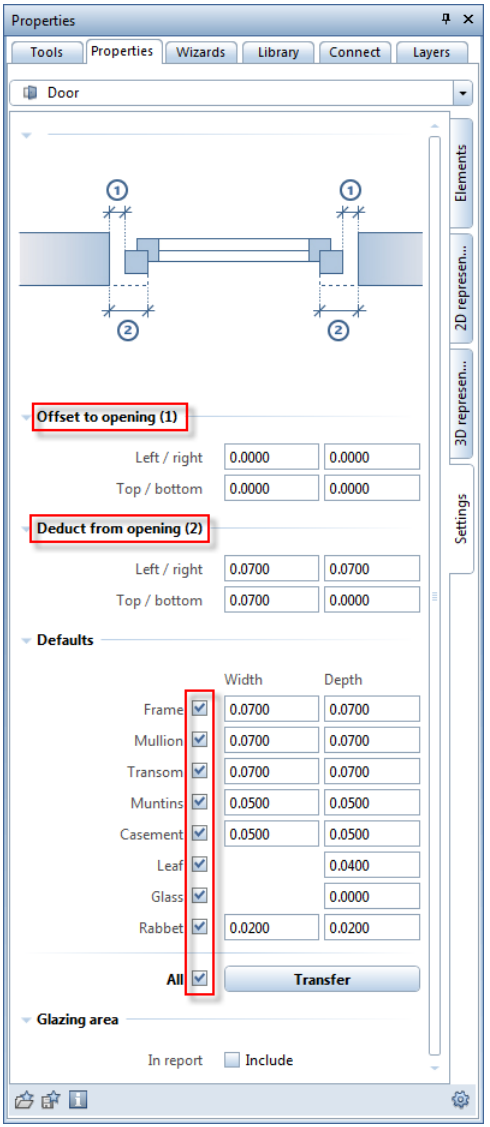
Glazing area
In report Include


Properties
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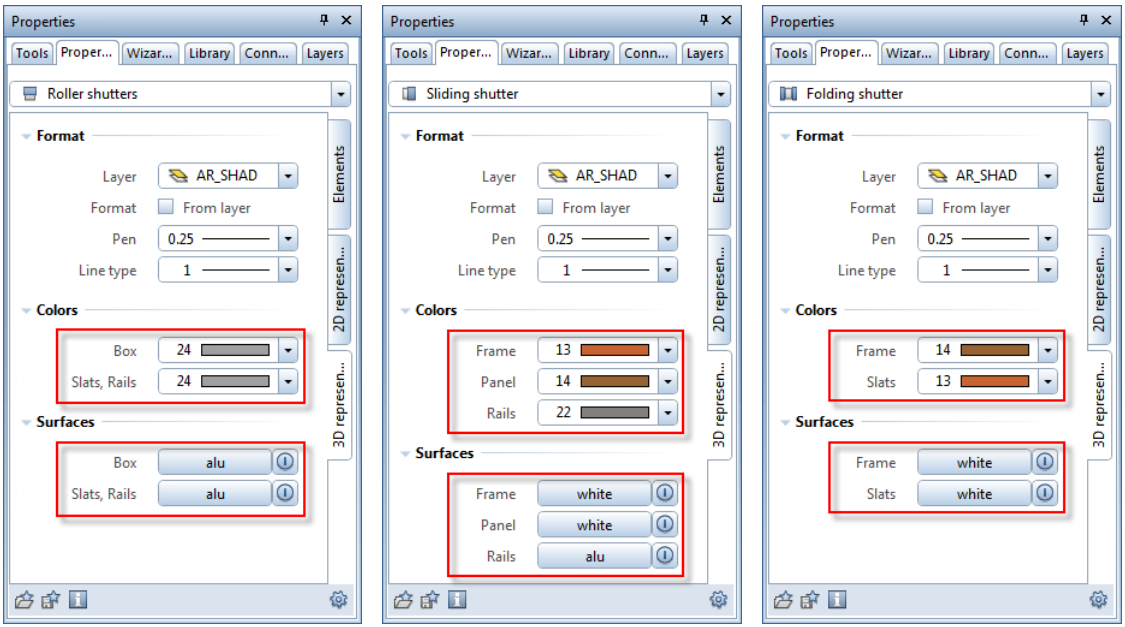
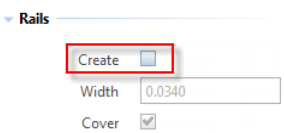
Glazing area
In report Include

New parameters for shading SmartParts

You can assign different colors and surfaces for the **3D representation** of shading SmartParts (**roller shutters**, **sliding shutters**, **folding shutters**).
For **roller shutters**, you can do this for the **box** and the **slats/rails**. For **sliding shutters**, you can do this for the **frame**, **panel** and the **rails**. For **folding shutters**, you can assign different colors and surfaces to the **frame** and the **slats**.



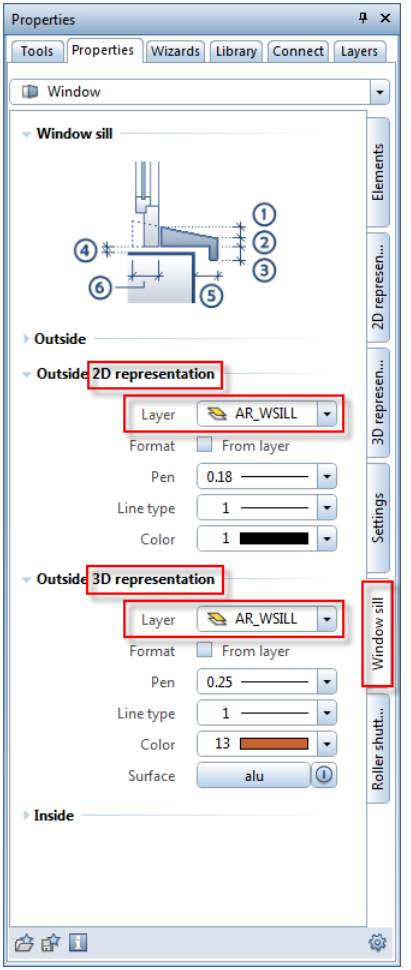
If you want to use sliding shutters in presentation drawings, you can display them **without** rails. You can find the corresponding option on the sliding shutters' **Elements** tab (**Shading SmartPart** tool in the **Basic: Walls, Openings, Components** module).

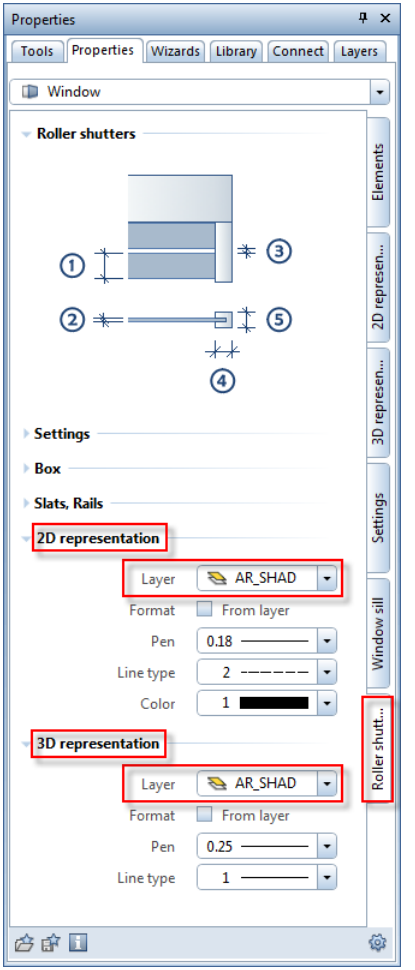


Different layers for 2D and 3D

You can now assign different layers for displaying SmartParts for roller shutters and window sills in 2D and 3D.

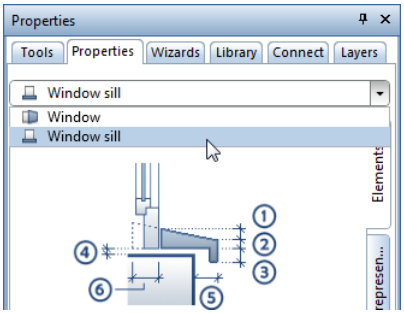
You can do this when you create window sills and roller shutters integrated in window SmartParts: select the **Window SmartPart** tool and the **Window sill** and **Roller shutters** tabs.

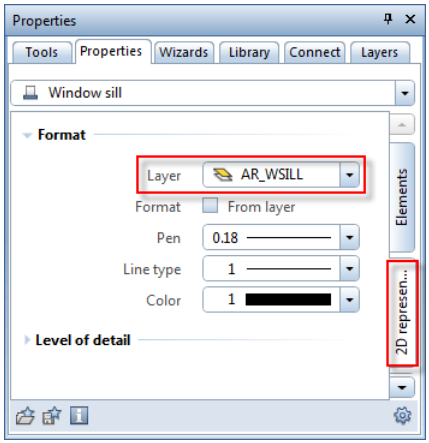


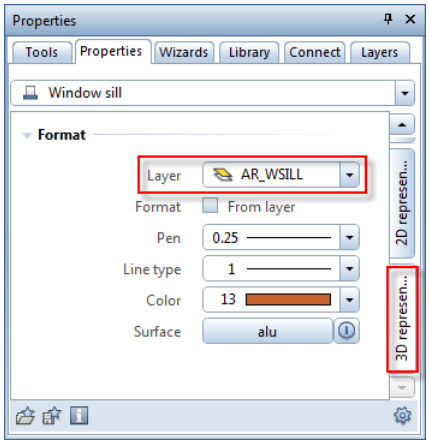


In addition, you can assign different layers when you create separate SmartParts for window sills and roller shutters.

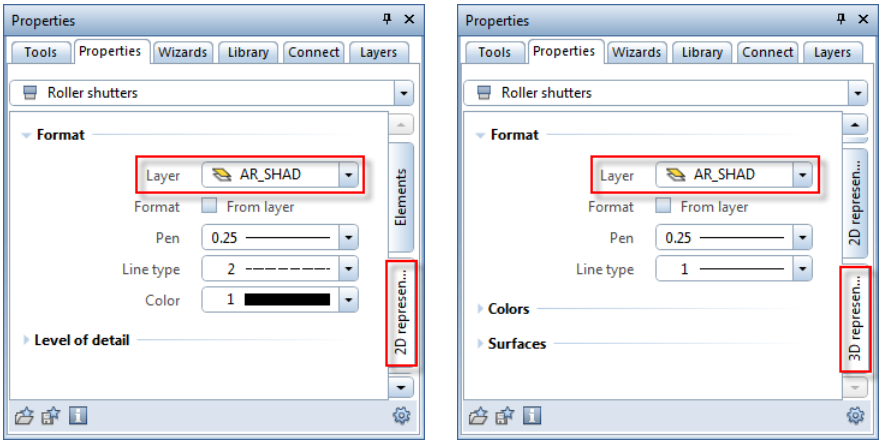
In order to create a separate window sill SmartPart, select the **Window SmartPart** tool and choose window sill in the list box at the top of the palette.







In order to create separate SmartParts for roller shutters, use the **Shading SmartPart** tool. Here, too, you can assign different layers for displaying the SmartPart in 2D and 3D.



The default settings are the following layers:

- For window sills: AR_WSILL
- For roller shutters: AR_SHAD
- For sliding shutters AR_SHAD

New reports for SmartParts

In order to analyze **Domed Roof-Light** SmartParts, you can use the new `Domed roof-lights.rdlc` report in the **Reports** tool. Open the **Finish** folder and the **Windows, Doors**) subfolder. This report lists the domed-roof lights per story, including the curb heights, dome heights and the dimensions of the associated unfinished openings.

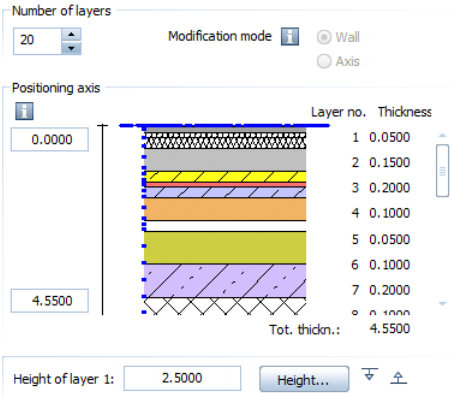
In order to analyze windows placed at an offset, you can use the new `Window offset.rdlc` report in the **Reports** tool. Open the **Finish** folder and the **Windows, Doors** subfolder. This report analyzes SmartParts and smart symbols you placed at an offset from the window opening. The report displays the window elements graphically, including the number, width, height and area per story. In addition, it lists the opening dimensions, including the width and height. You can also see the total window area and the number of window elements.

More new features in the Architecture family

Walls with up to 20 construction layers

In earlier versions, you could enter up to five wall layers. Now you can define up to 20 layers.

Instead of clicking an icon, you can now use a data entry box to define the number of layers in a wall. As usual, you can specify the height separately for each layer.



Important: in earlier versions, walls could only have up to five layers. If you convert a wall with more than five layers to an earlier version, you get a 3D box for each layer. The geometry of the wall stays the same. Surface elements become 2D surface elements.

The following tools work with up to 20 layers:

- Wall
- Upstand
- Create Walls from Lines
- Apply Archit. Component Properties

Positioning the component axis

You can now position the component axis more easily. The icons to the right of the preview are no longer available. You can still position the component axis intuitively by dragging it to its new position. Point to  to see a short description of how to position the component axis.

You have the following options:

- **Intuitive**
  Use the mouse to move the axis: the cursor becomes a double arrow, and the component axis will snap to the positions marked by small black boxes. The values on the left of the preview show the distance to the edges.

  The following positions are predefined:
  Left edge of component or layer
  Right edge of component or layer
  Center of component or layer

- **Custom position based on value you enter**
  Click one of the data entry boxes on the left of the preview. Enter any value defining the distance between the axis and edge of the wall. The program automatically calculates the value for the other side.

The following tools also offer these new options for the component axis:

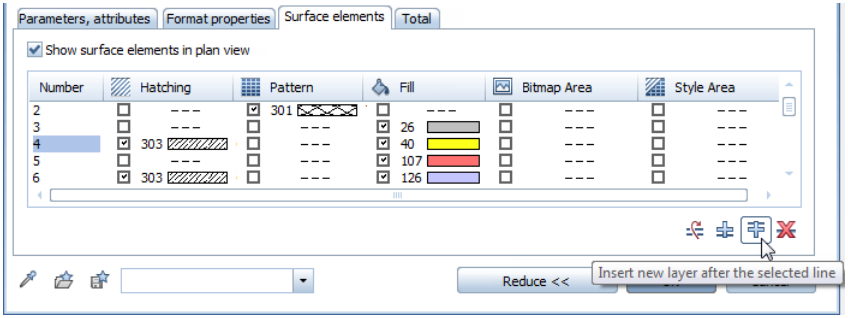
-  **Roof Covering**
-  **Downstand Beam, Upstand Beam**
-  **Strip Foundation**

Rearranging layers

In order to rearrange the layers, you can use the icons at bottom right in the dialog box. In earlier versions, you could find these functions only on the **shortcut menu of the columns**:

- **Reverse setup of layers** (for example, if you want to enter the wall in the opposite direction)
- **Insert new construction layer before the selected line**
- **Insert new construction layer after the selected line**
- **Remove selected line**

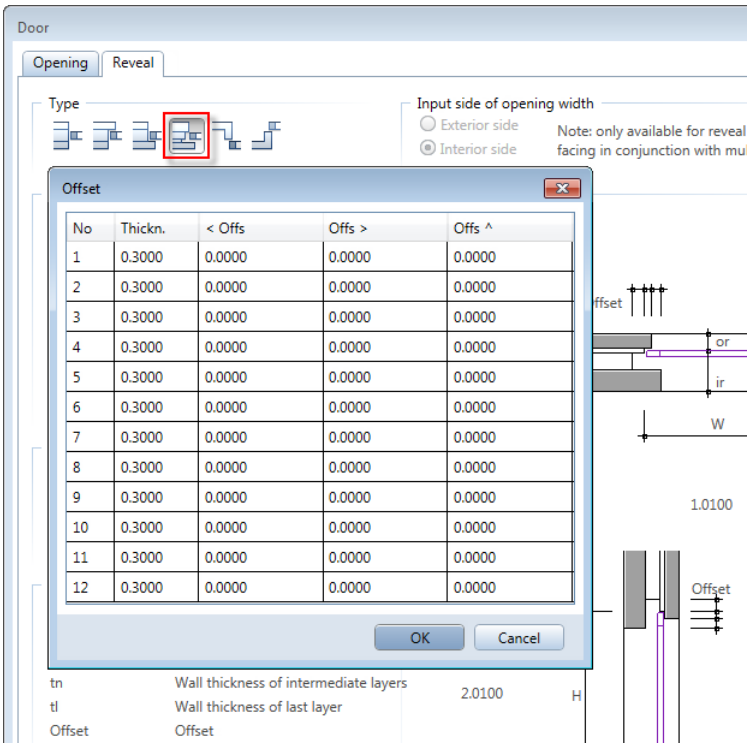
You must select a layer before you can use these functions. In order to select a layer, click it in the **Number** column.



Openings in multi-layer walls

Most reveal types in multi-layer walls relate to the first or last wall layer.

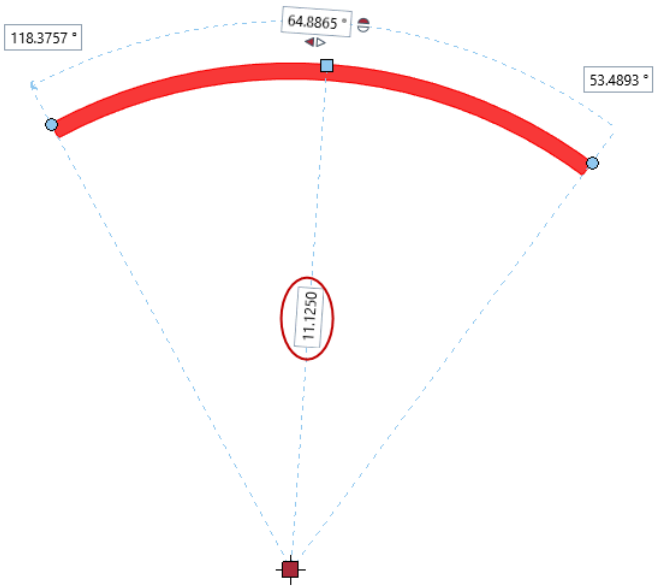
The only difference is the type shown below: here, you can define the offset separately for each layer.



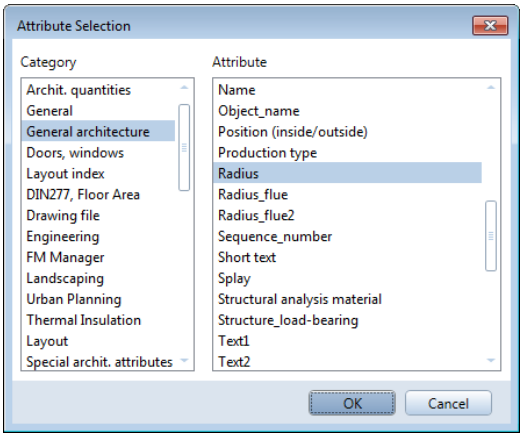
If the reveal types do not meet your requirements, you can use the advanced options of **Opening Designer**.

Attribute for radius of curved wall

The program now provides an attribute for the radius of a curved wall.



You can find the **Radius** attribute in the **General Architecture** category. This new attribute returns the values in millimeters. If you want to analyze the **Radius** attribute, you can add it to label styles or reports.



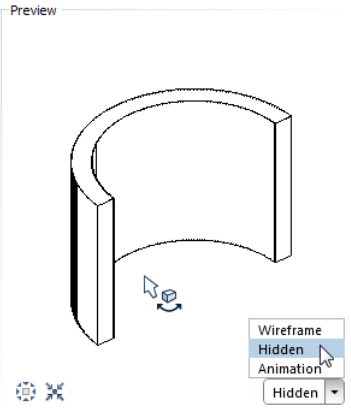
Preview of architectural elements

A preview lets you check the architectural element you are defining.

In the previous version, you could control the element displayed in the preview using a limited version of the **viewport toolbar**. In Allplan 2015, this toolbar includes a number of additional tools and advanced options to account for Unified Graphics.

In addition to selecting the **standard views**, you can use **Zoom All** to quickly display the element in its entirety again. Apart from **Wireframe** and **Animation**, you can also select **Hidden** for the view type. So that you can navigate intuitively, **Navigation Mode** is active by default.

Note: The settings in the preview are equivalent to the default settings. You cannot change them.

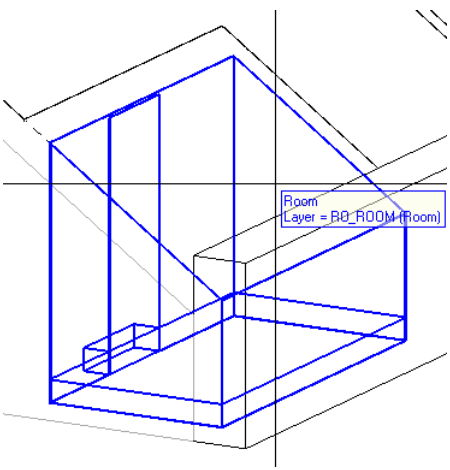


Displaying finish elements

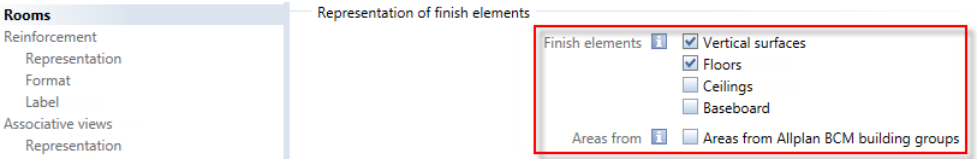
In earlier versions, finish elements of rooms (vertical surfaces, floors, ceilings and baseboard) were only visible in animation. You could make the corresponding settings in the **Options - Animation**. The program extruded the elements accordingly and displayed them with the surfaces assigned.

Allplan 2015 now displays finish elements in all viewports:

- In viewports with the **Animation** view type and in renderings: the program extrudes the finishing surfaces and displays them as animation surfaces.
- In isometric views and perspective views of the **Wireframe** type: the program displays the finish elements as lines.
- In isometric views and perspective views of the **Hidden** type: the program extrudes floors and ceilings and displays them as surfaces.
- In plan view with the **Wireframe** view type: finish elements are not visible.



You can no longer find the settings in the **Options - Animation**. Now you have to look in the **Options - Rooms**.

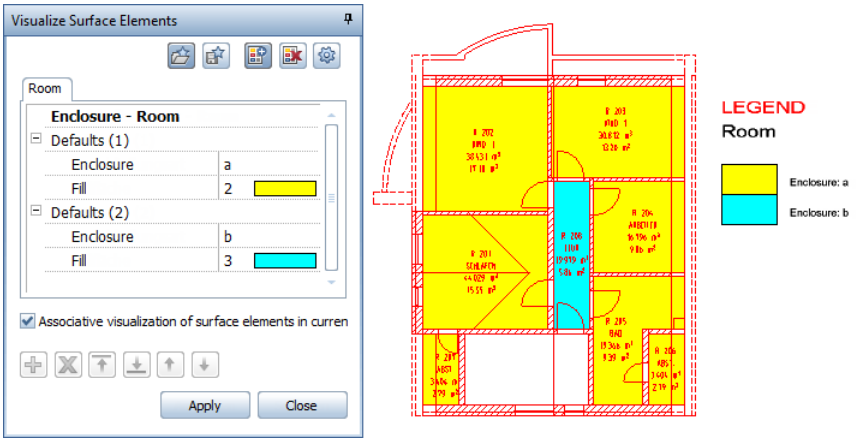


Visualizing surfaces associatively

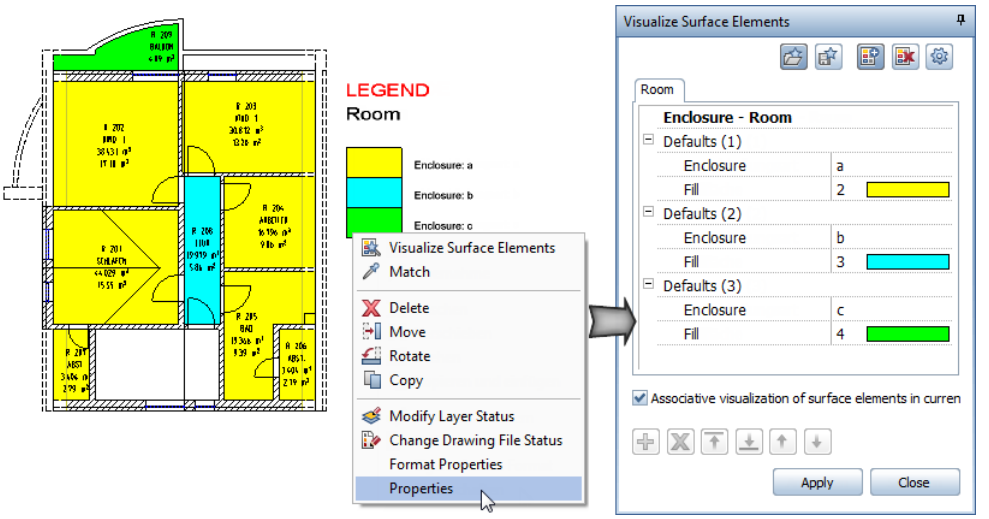
We added a new associative feature to the **Visualize Surface Elements** tool. If you select the **Associative visualization of surface elements in current document** option for an existing legend and you create an element with a criterion that is still missing from surface visualization, the program automatically creates an entry with this criterion and adds the new element to the legend.

Due to this new feature, we changed the shortcut menu of the associative legend. Now you can double-click the left mouse button to open the dialog box.

Example of surface visualization of rooms with the enclosure types "a" and "c".



When you add a balcony with the enclosure type ”c”, the program automatically applies a fill and updates the legend.



Engineering

One important development goal for Allplan 2015 Engineering was toprovide even better support for the planning of bridges and tunnels to save time and increase quality, for example with regard to the geometrically correct determination of sections along any curves. For structures, you can now define and calculate sections in just a few clicks along arcs, clothoids and splines, and not just along straight lines, as before. We have therefore made the creation of these sections so much faster and easier that the work is finished in seconds, rather than hours.

Bridges and other structures with a large span are often designed asprestressed concrete constructions. With a new tool for modeling tendons, the time you need for the 3D planning of prestressed concrete constructions is now considerably reduced. The new tool determines the double-curved 3D form of the tendon from the 2D representations in the site plan and longitudinal section. If required, you can also generate the anchor plate and anchor headwith the extension of the encasing tube and of the spiral reinforcement. By checking for collisions between reinforcement, tendons andfixtures, you also significantly reduce the risk of errors.

To enable you to further increase your efficiency in reinforcementplanning, we have introduced the familiar direct editing and handleoptions for the linear placement of the reinforcement. You can now change important parameters such as the piece number and spacing in the direct vicinity of the placement. You intuitively adjust the placing area using handles.

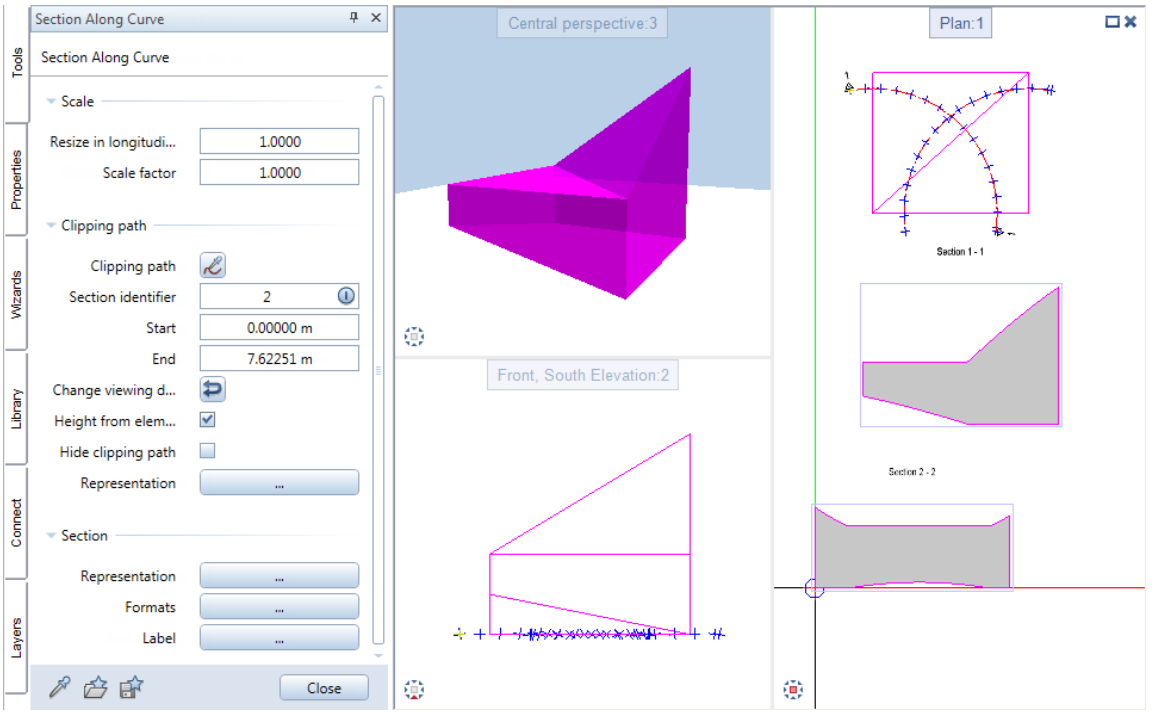
The new Bridge and Civil Engineering module

The **Bonus Tools** family now includes a special module for civil and bridge engineering - the new **Bridge and Civil Engineering** module. In addition to the familiar **Bridge/Civil Engineering Component** and **Modify Bridge/Civil Engineering Component** tools, which used to be in the **3D Modeling** module, this new module includes the new **Section Along Curve** and **Tendon** tools.
So that you do not need to switch modules, the **Create** and **Change** areas of this new module also include th main tools from the **3D Modeling** module.

Section along curve

You can use the new **Section Along Curve** tool to create a section along any 2D element. This section does not have a depth.

Start by defining the parameters for the **Scale**, **Clipping path** and **Section** in the **Section Along Curve** palette. Then click the 2D element for the clipping path in plan and select the viewing direction by clicking in the workspace.



A preview of the section is attached to the crosshairs. Before placing the section, you can change its parameters, use to use a new element for the clipping path or modify the **Start** and **End** of the clipping path. Click if you want to switch the viewing direction.

The section will not update automatically to reflect any changes you make to the 3D model. As soon as you modify the section, the program will update the section. In order to modify an existing section, select the **Modify Section Along Curve** tool and click the view border of the section.

You can also open the **Section Along Curve** palette by double-clicking the view border with the left mouse button or selecting **Properties** on the shortcut menu of the view border.

Points for calculating the clipping path

You can define the points of the clipping path the program is to use to calculate the heights of the elements. To do this, open the **Representation** palette by clicking the **Representation** button in the **Section** area. This is particularly helpful if the edges are not linear, producing as accurate a section as possible.

The individual settings mean the following:

Element edges

These are the points of intersection between the clipping path and the 3D elements as well as the endpoints of the clipping path. The program always calculates the height at these points.

Station points

If the clipping path is a **composite element**, these are the points you defined with **Station Element**.
The program does not take into account points created with **Divide Element** or station points on elements that are not part of the composite element.

Horizontal points

These are the points where the 2D elements of the clipping path meet, such as the point where a line touches a clothoid.

0-km axis

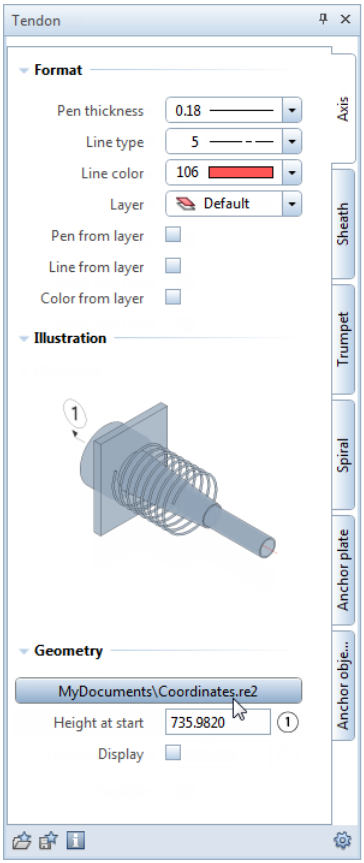
This is the reference point of stationing, which is only available for a composite element. It is indicated by a cross in construction line format.

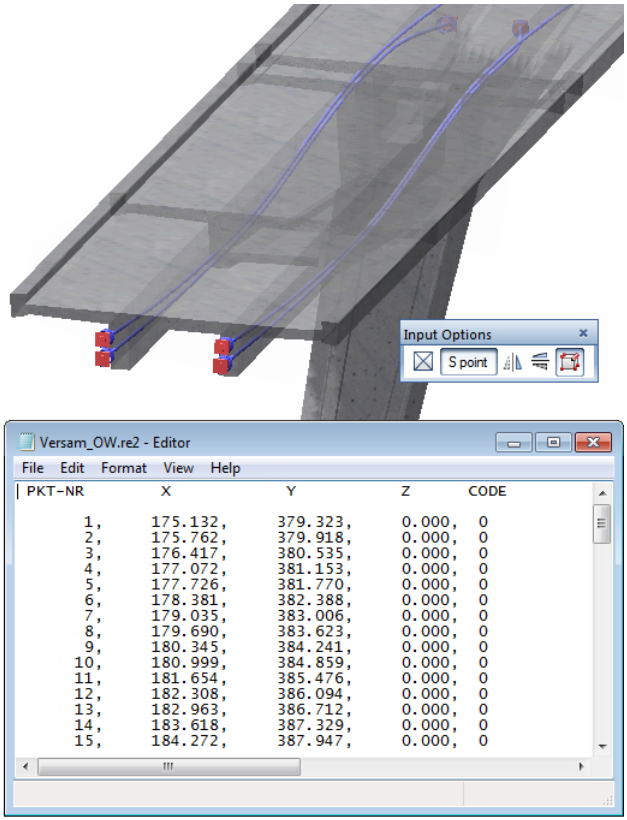
You can move the reference point using **Ref Pnt** in the **Modify Element Parameters** tool. The value of the reference point is irrelevant.

Tendon

You can use the new **Tendon** tool to create the sheath and anchorage elements for a prestressing tendon in bridge and civil engineering components. The tendon uses an axis as the basis. This axis consists of points saved as a coordinate point file ending in *.re2.

You can define the format properties, geometric parameters and display settings separately for each element of the tendon. In order to position the tendon in space, you need to define the axis' **Height at start** and the sheath's **Offset** in relation to the axis.





If you want to modify an existing tendon, double-click it or select **Properties** on the shortcut menu. Using favorite files, you can replace a tendon with another one with a single click.

Axis of tendon

In order to define how the axis of the prestressing tendon is positioned in space, you need to enter a number of points. The program then calculates the axis by connecting these points. The X and Y coordinates of these points are based on the two-dimensional plan view. For the height, the program uses the Y coordinates of a two-dimensional elevation view. Starting with the first point at a height of 0.00, the program calculates the heights of the following points based on the difference between the Y coordinates. You can define the initial height of the tendon axis. To do this, use the **Height at start** parameter in the palette.

To create the file for the tendon axis

1 Design the axis of the prestressing tendon in plan and elevation view. Use the **Line**, **Polyline**, **Circle**, **Spline**, ... tools.

Place the plan view of the tendon in its correct position. You do not need to display the actual length of the tendon in elevation view. What's important is that you enter the heights correctly.

Note: If the tendon is available as a 3D element, you can create a hidden line image of the plan view. In order to create the elevation view, you can use the **Section Along Curve** tool.

2 If the tendon axis consists of several elements, combine them into a **Composite Element**.

3 Use **Divide Element** to divide the tendon axis into equal parts in plan view and in elevation view.

In order to divide the tendon axis at fixed points that are not spaced equally, you can divide the tendon axis a number of times using the **Part of selected element** setting in the **Input Options**.
If you have the **Site Plan** module, you can also use the **Station Element** tool. Here, select the **Indiv** setting in the **Input Options**.

Note: When you create single elements, the program places the coordinate points in the element direction. In the case of composite elements, however, it is the reference element that defines the

direction. In doing so, the program ensures that all texts can be read.

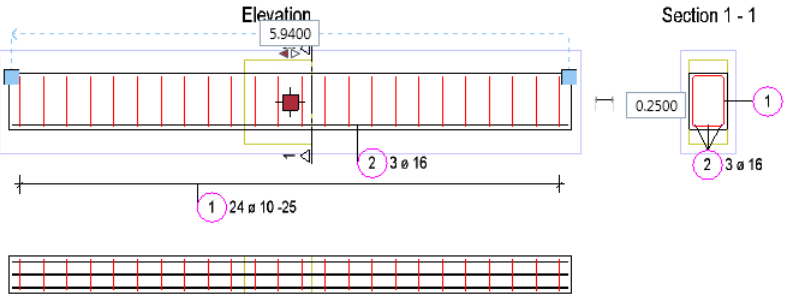
4 Start by saving the coordinate points of the plan view using the  **Import, Export Point File** tool.
Select the **Coordinates** file type and the **".re2"** data type. In the **Input Options**, click **On Element** and then click the element or the composite element in plan view.

5 After this, use the same approach to save the coordinate points of the elevation view to the file you have just defined.
Select **Attach** to write the coordinate points of the two views consecutively to one and the same file.

Note: When you export the file, the first half of the entries defines the X and Y coordinates of the points and the second half defines the heights. Exporting the file produces a different tendon if the number of points in plan view differs from that in elevation view.

Using handles for modifications

You can now use handles to change the placing length, spacing and number of linear placements. Select the entire placement by pressing the SHIFT key and clicking. You can also enclose the placement in a selection rectangle. The **Central move handle** and the **Geometry handles** appear. In addition, you can see a data entry box for the placing length, spacing and number.



You can make the following modifications:

- Use the context toolbar to move, copy, rotate or mirror the placement.
- Click the **Central move handle** and move the placement to its new position. You can copy the placement by pressing and holding the CTRL key.
- Click a **Geometry handle** and change the placing length in the direction of the placement. You can also enter values in the data entry box. Use the arrows to define the direction in which you want to apply the change.
- Change the spacing or number by entering a value in the data entry box. In order to toggle between these two parameters, click the symbol to the left of the data entry box.

General display parameters

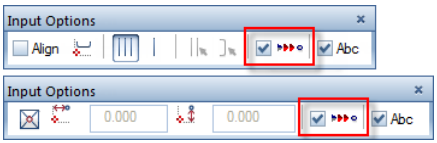
In earlier versions, the settings for displaying engineering elements (**shell entities**, **fixtures**, **reinforcing bars** and **meshes**) applied only to animation and to 3D elements derived from these engineering elements. Allplan 2015 now uses these settings for all view types. There are two exceptions: if you print layouts or display elements with the **Wireframe** view type in **Plan**, the program still uses the settings defined in the **Bar reinforcement** area of the **Options - Reinforcement - Representation**.

Now you can find the general settings for **Bend** and **Cross-section** in the new **Representation in general** area of the **Options - Reinforcement - Representation**. The settings for the format properties are still on the **Options - Desktop environment - Animation** page. Note the following special features:

- When you select **Ignore elements**, the program does not display the elements in views of the **Hidden**, **Animation**, **Sketch** and **RTRender** type. The same applies to 3D elements derived from these elements.
  For the **Wireframe** view type, the program uses the format properties of the elements.
- When you select **Separate surface for animation**, the program uses the **Object color** and **Transparency** defined in views of the **Animation** and **RTRender** type. For all other view types, the program uses the format properties of the elements.
  For 3D elements derived from these elements, the program uses the current settings on the **Format** toolbar.
- When you select **Surface colors from diameters**, the program displays the diameters in the colors assigned in views of the **Animation** and **RTRender** type, regardless of the settings. If you want to display all other view types and 3D elements derived in the same way, you must deactivate the **Color stands for pen** option in **Show/Hide**. Otherwise, the program uses the format properties of the elements. For 3D elements derived from these elements, the program uses the current settings on the **Format** toolbar.

Point placement for 2D reinforcement

If **Reinforce with 3D model** is not active in the **Options**, you can now select **Point mode** in the input options of the **Place Bar Shape** tool. The program places the bars of the selected mark as points in the section view. Consequently, you do not need to define the view of the bending shape in relation to the placing line.



Interdisciplinary Teamwork

The reliable exchange of data with planning partners is a fundamentalprerequisite for efficient execution of building projects. As a member of the Open BIM Initiative, Nemetschek Allplan is therefore constantly committed to improving interdisciplinary teamwork.

In addition to the Allplan IFC 2x3 Coordination View 2.0 export, the import has now been tested and certified in Allplan 2015 through numerous test series. We therefore ensure even more reliable data exchange with other Open BIM solutions.

Certified IFC import to Allplan

Allplan 2013 introduced the certified export to IFC 2x3 Coordination View 2.0. The import has now been tested and certified in Allplan 2015 through numerous test series.

Easier sending of digital layouts

Another important aspect of data exchange is well-thought-out digitallayout management. Our **Allplan Exchange** web application is the ideal tool for this.

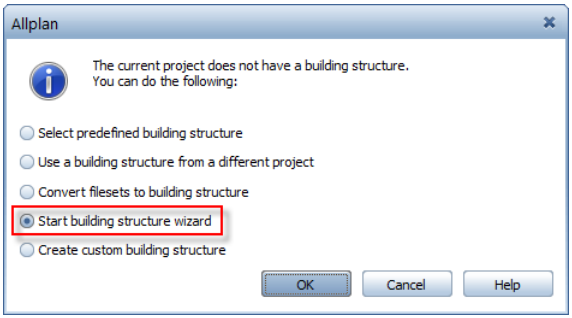
With Allplan 2015, Allplan Exchange now has **single sign-on** with the Allplan Connect and Allplan Campus customer portals. This means that after one-time login, registered users can access allcustomer portals and web applications.

Furthermore, we have made numerous improvements in Allplan Exchange. You can find the right document in just a few clicks thanks to the new filter functions and optimized sort functions. The administration of contacts has been made clearer, and roles and rights are now visible for all employees. Layout index attributes are also displayed in the download area and therefore provide detailed information on revision levels and releases. In the ”All Documents” and ”My Downloads” areas, you can now group together several files for download in a zip file and download them all in one step.

More new features in the Basic family

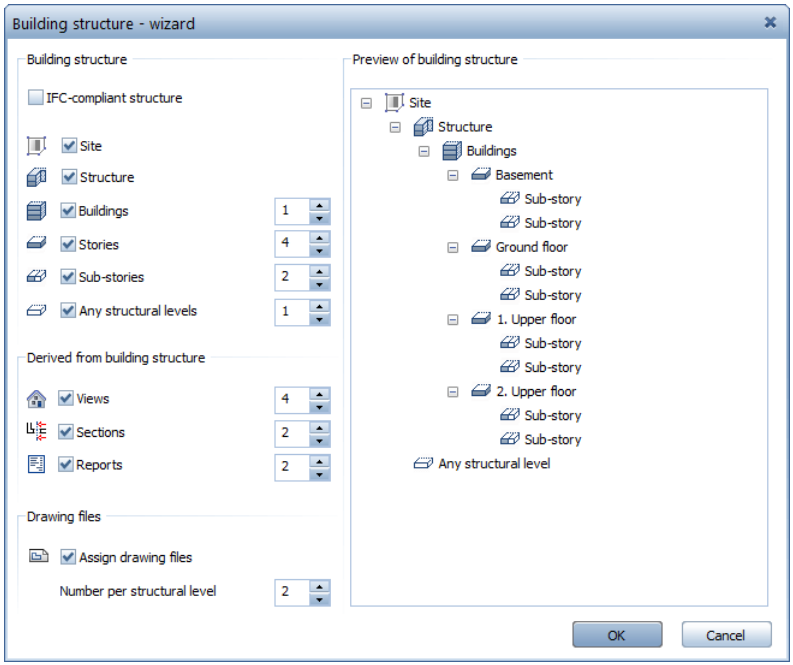
Improved building structure

If a project does not have a building structure, you can now create the structure with the aid of a wizard. In order to open this wizard, select **Start building structure wizard** in the following dialog box.



You can see this dialog box if you select the **Open on a Project-Specific Basis** tool in a project without a building structure or if you delete an existing building structure.

Wizard for creating a building structure



Building structure

Select the structural levels you want to include in the building structure. If you select **IFC-compliant structure**, you can select only the structural levels and drawing file assignments that are in compliance with IFC. In order to remove a structural level, clear its check box.

Derived from building structure

Views, Sections, Reports

Select the structural levels you want to include in the building structure.

Drawing files

Assign drawing files

Select this option to assign drawing files to each structural level. Using **Number per structural level**, you can define how many drawing files you want to assign to each structural level. You can select up to ten drawing files.

Preview of building structure

You can see a preview of the building structure.

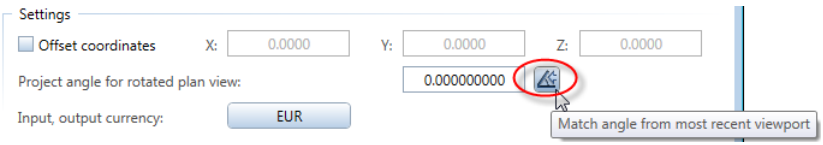
More improvements to the building structure

- The building structure is selected automatically. You can hide the **Fileset structure** tab.
- Even if you do not create a building structure, Allplan assigns ten drawing files and makes drawing file 1 current.

Project angle for rotated plan view

In the **Project Settings** dialog box, you can now match the **Project angle for rotated plan view** from the most recent viewport.

You can enter up to nine decimal places instead of three.

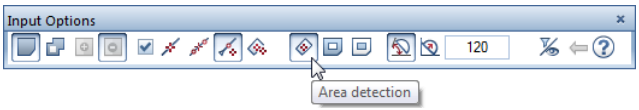


Area detection

When **entering polylines**, you can now select **Area detection** in addition to one of the options for **elements**. In earlier versions, only one of the options could be active at any one time.

Which option will take effect depends on where you click next: If you click within an area, **Area detection** has priority. If you click an element, the program looks for **elements**.

Area detection now behaves in the same way as in earlier versions when *outline auto-detect* was in the dialog line.



Changes in the Options

Accelerated hidden line representation

You can no longer find the settings for the **Accelerated hidden line representation** in the **Options - Desktop environment - Display - Representation** area: the **Hidden** view type has replaced the **Accelerated hidden line representation**. You can use to modify the view types.

Display texture in animation window

You can no longer find the **Display texture in animation window** option in the **Options - Desktop environment - Animation - General** area. Click to control textures in views of the **Animation** type.

Representation of finish elements

You can now display finish elements of rooms (vertical surfaces, floors, ceilings and baseboard) not only in viewports of the **Animation** type but also in most other view types. Therefore, we moved the **Representation of finish elements** area from the **Options - Desktop environment - Animation** page to the **Rooms** page.

For detailed information, see Displaying finish elements (on page 55).

OpenGL for normal viewports

The **Use OpenGL for normal viewports** setting in the **Options - Desktop environment - Display - Hardware acceleration - graphics** area now applies to all viewports. Therefore, we changed its name to **Use OpenGL for all viewports.**

By selecting the **Use OpenGL for all viewports** option (default setting), you have advanced options in viewports with the **Animation** and **Hidden** view type. In addition, you can select the **Sketch** view type. If you switch this option off, TrueType text appears clearer, but you cannot select the **Sketch** view type.

Animation options

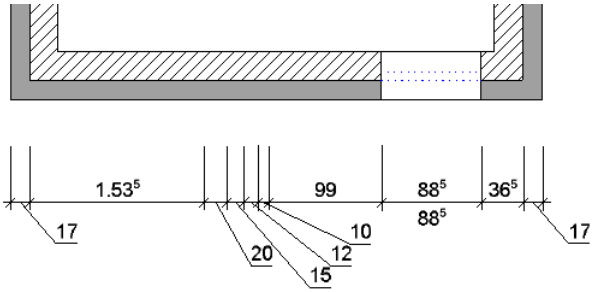
The **Animation Options** tool (**Animation** module) no longer exists. It was only a shortcut you could use to open the **Options - Desktop environment - Animation** page.

New 'Leader' rule for position of dimension text

As you know, you can define the position of dimension text in dimension lines freely or using fixed rules. Now you can use the new **Leader** rule, which is common practice in Russia.

Rule: Leader

The **position** of the dimension text is predefined: centered and above the dimension line. Consequently, the dimension text is always placed exactly in the middle so that it is between the arrowheads and above the dimension line.
If there is not enough space between the arrowheads, the program adds a leader to the dimension text and places the dimension text on the side of the dimension line that is opposite the reference points. The leaders start in the middle between the arrowheads. The program chooses the angle and length for each leader in such way that the texts do not overlap.



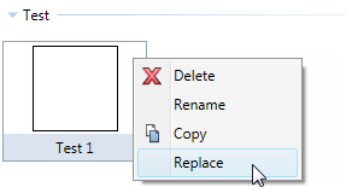
You can edit dimension text with leaders as usual. For example, you can use **Move Dimension Text**. The leaders adapt automatically. Click **Adjust Location** to restore the original state.

If you select the **Leader** rule for a block of dimension lines later, you can adjust the dimension lines using the **Move Dimension Line** tool, **Resize dimension line spacing** option.

Replacing symbols

It is now easier to replace existing symbols in the **Symbols** library.

All you need to do is open the shortcut menu of the symbol and click **Replace**:



Note: You cannot replace symbols in the **Default** folder.

The dialog box for saving elements as symbols opens. You can now save the new symbol, replacing the old one.

Managing Projects

Using project templates

A project template is a project you can select as a template when you are creating a new project. Consequently, the new project is an identical copy of the project template selected. You can save any project as a project template. You can find the project templates in the `\Std\ProjectTemplates` folder.

You can delete or rename project templates in ProjectPilot.

Difference between project structures and project templates:

- Project *structures* include only the structural information of the project, such as the names of the drawing files or the names of the elements in the building structure.
- Project *templates* also include the contents of the drawing files and layouts as well as the settings for the resources (project-specific, office-specific).

To save a project as a project template

- Start ProjectPilot and copy the project by dragging it to the **Office\Project templates** folder.

  Or

  On the **File** menu, click  **New Project, Open Project...**. Open the shortcut menu of the project and select **Copy to project templates**.

Project organizations in \Etc folder

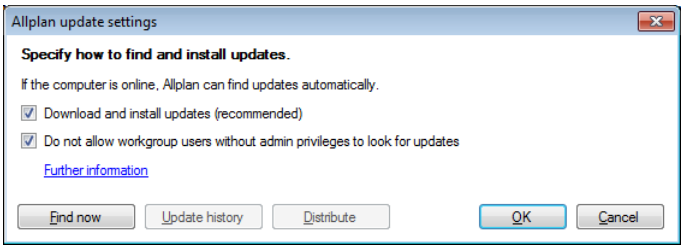
You can now find the project organizations in the `\Etc` folder. They used to be in the `\Std` folder. Allplan proposes a simple project organization. Clear the check box if you want to create your projects without project organizations. Allplan will remember this setting the next time you create a project.

Installation

No 32-bit version

The 32-bit version of Allplan no longer exists. Allplan 2015 is the first version to be available only in 64-bit. Consequently, Allplan 2015 does not run on Windows Vista.

Automatic updates easier to configure



Download and install updates (recommended)

Allplan automatically looks for new updates if the computer is online. If there is a new update, Allplan downloads it automatically. You can then install the update the next time you start Allplan.

Do not allow workgroup users without admin privileges to look for updates (only for administrators)

If this option is selected, users who are not Allplan administrators cannot download updates. In this case, only the Allplan administrator can install updates by clicking **Distribute**.

Find now

When you click **Find now**, Allplan checks whether new updates are available. If there is a new update, you can decide whether you want to download it or not. You can then install the update the next time you start Allplan.

Update history

Informs you of the updates that have been installed on this computer.

Distribute (only for administrators)

By clicking this button, the Allplan administrator moves the update downloaded to the `\Updates` folder, making it available to all the users in the workgroup. Users can then install the update the next time they start Allplan.

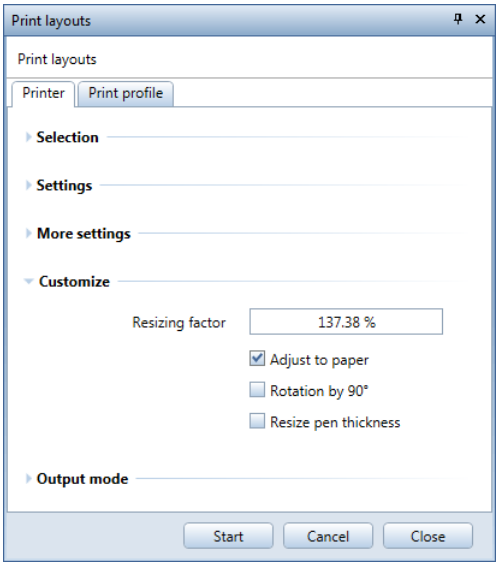
Layouts and Printing

The **Print Layouts** tool includes many more options you can use to **Print Layouts** to paper or file. You can also find changes in PDF export and print preview.

New option for resizing factor

If you want to reduce or enlarge the layout before printing, you can now configure the program to calculate the resizing factor automatically. All you need to do is select the **Adjust to paper** option. This only works with Windows drivers. Consequently, you no longer need to define the **resizing factor** in a dialog box.

You can now find all necessary settings on the **Printer** tab in the **Customize** area. Any settings you make here are only temporary. In other words, the program no longer saves them to the print profile. The next time you select the **Print Layouts** tool, the resizing factor is 100% and you need to set the options again.



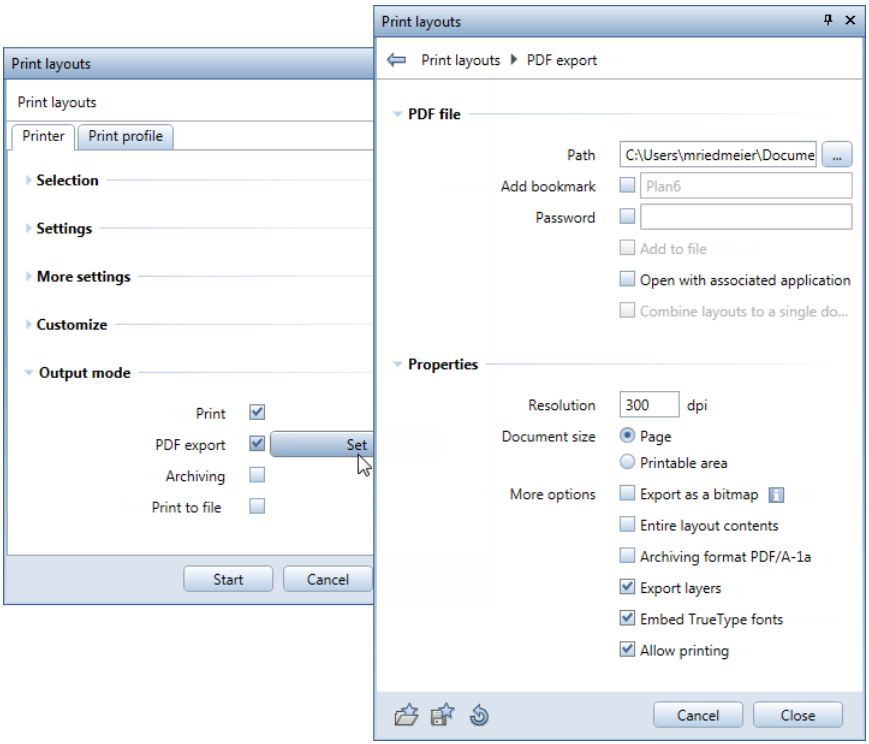
If you have selected **Adjust to paper**, the resizing factor adapts automatically when you change the format or orientation of the page or the format or orientation of the paper used by the output device. In order to calculate the resizing factor, the program always adjusts the page to the paper used by the output device. Allplan no longer rotates the layout automatically by 90°.

- A page **without** margins is resized in such a way that it is within the printable area of the output device.
- A page **with** margins is resized in such a way that it is within the paper size of the output device. The program ignores the margins of the output device. The margins of the page are taken into account but they are not resized. Only the printable area of the page is resized.

Advanced options for printing layouts

PDF export

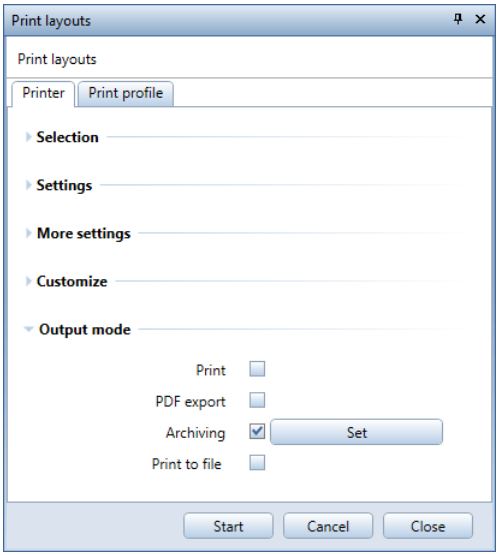
The **Output** mode area includes the additional **PDF export** option. As a result, you can now print the layout both to paper and to file in several ways. After having selected this option, you can define the parameters for the PDF file by clicking the **Set** button.



Except for the **Use print profile** and **Grayscale** parameters, you can see all the parameters of the **Export PDF Data** tool. For these two parameters, the program uses the settings on the **Print profile** tab.

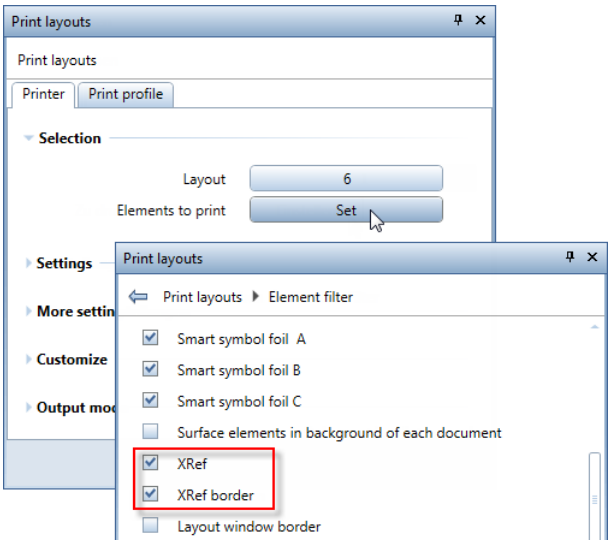
Archiving

You can now control printing using the **Print** option. You cannot select **Print** and **Print to file** at the same time. Only one option can be active at any one time.
By selecting the **Archiving** option, you can now archive layouts using the  **Print Layouts** tool. Consequently, you no longer need the  **Archiving** tool. So we removed if from the **Create** area.



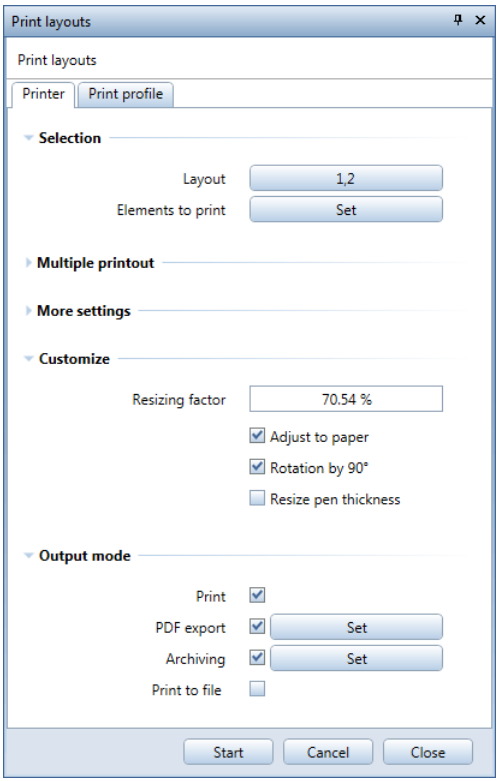
XRefs in layouts

By popular request, you can now include XRefs and XRefs borders in printouts using the **Print Layouts** tool. All you need to do is click the **Set** button beside **Elements to print**.



Advanced options for multiple printouts

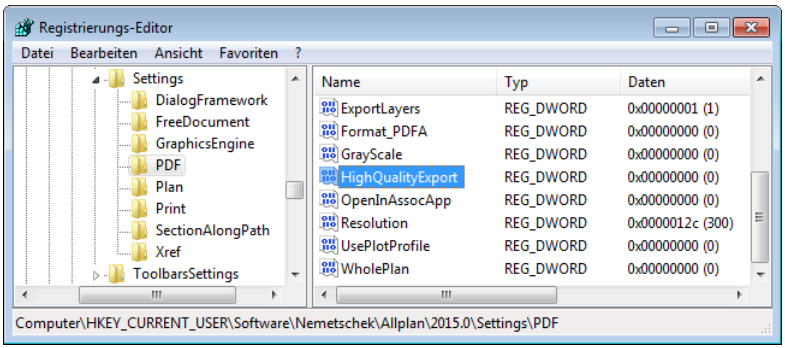
All the new options for single layouts are also available for multiple printouts. You need to define the settings in the **Customize** area separately for each layout.



Quality of exported PDF data

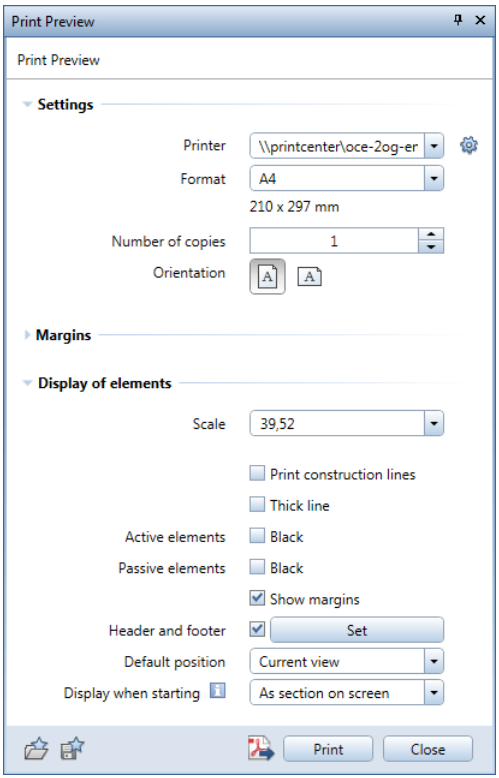
So that large arcs are positioned correctly in PDF files, we improved the export quality in Allplan 2014-1. This quality is controlled by an entry in the registry. As the data volume may increase significantly, the default setting for PDF export is now standard quality again.

If you still want to use the 'HighQualityExport' setting, you can change the entry in the registry.
Start the registry editor by clicking the Windows icon at bottom left. Type in **regedit**. Go to HKEY_CURRENT_USER -> Software -> Nemetschek -> Allplan -> 2015.0 -> Settings -> PDF. Open the **HighQualityExport** value on the right by double-clicking it. Then change the value from **0** to **1**.



Redesigned print preview

We adjusted **Print Preview** to the tool for printing layouts. You can now define the settings in a palette. So you can immediately see what you have changed. As opposed to the previous version, you can now use any file type for the bitmap in the header and footer. In addition, you can see the font you have chosen for text in the header and footer. The program no longer calculates the height of the header and footer from the value entered minus the margins. Instead, it now uses the value you actually entered.



The former **Magnifier** and **Rotate** tools are no longer available. Due to Unified Graphics, the **Print animation window in high resolution** option has become irrelevant. So we removed it.

System requirements for Allplan 2015

Before you begin, please check that all the computers where you want to install Allplan 2015 meet the minimum requirements.

Hardware requirements

Minimum requirements

- Intel Core 2 processor or compatible
- 4 GB RAM
- 5 GB free hard disk space
- OpenGL 3.3-compatible graphics card with 1 GB RAM; resolution: 1280 x 1024

What we recommend

- Intel Core i7 or Core i5 processor or compatible
- 8 GB RAM
- OpenGL 4.2-compatible graphics card with 2 GB RAM; graphics card in accordance with certification http://www.nemetschek-allplan.com/info/graphiccards

Software requirements

- Windows 8.1 64-bit
- Windows 7 64-bit, Service Pack 1
- Windows Server 2012 R2, Standard Edition

Notes

- **What we recommend**: Windows 8.1 64-bit
- **Recommended file server**: Windows Server 2012 R2, Standard Edition

  Notes:

  - Hardlock license server is no longer supported!
  - Workgroup Online (Workgroup over the Internet) requires an FTP server.

Further information

nemetschek-allplan.com/info/sys2015 provides more information on the following topics:

- System test tool
- Graphics card
- Printer
- Citrix Terminal Server
- Allplan data server

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