

ALLPLAN Leviat BIM Plugin instructions


Plugin version: 5.x
for Allplan 2023 / Allplan 2024 / Allplan 2025 / Allplan 2026

How to install the Plugin - Admin rights required	2
Getting started with the Plugin.....	4
Navigating in the Plugin.....	5
First steps – Plugin project environment settings	6
Configuring a product	7
Delete a configuration or individual values.....	8
Options for inserting a product	9
Insert with direct rotation and/or linear placement	9
Positioning.....	10
Setting STYLES	12
Setting OPTIONS (Catalogue reference / LOG to scales).....	13
Open the Plugin in edit mode	14
Open the Plugin from Leviat menu bar	14
Checking Leviat product attributes	15
EXPORT: Creating a list of products in Excel.....	16
ALLPLAN Reports	17
Advanced installation options	18
Adjust the path for locally stored plugin data	18
Customized parameter mapping	18
Silent installation	18
Errors and known issues	18
Plugin update failed	18
Missing credentials issue	19

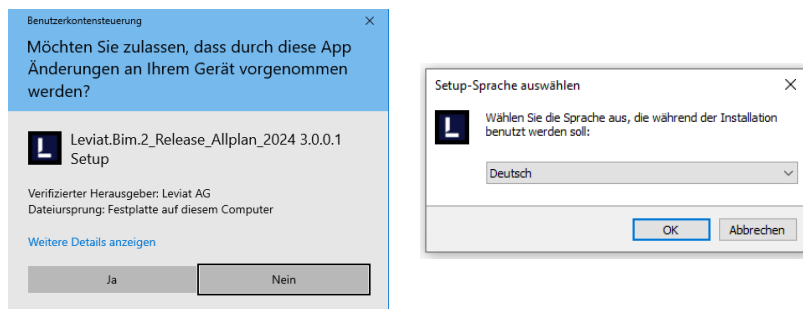
How to install the Plugin - Admin rights required

Note: The previous Leviat BIM Plugin versions need to be uninstalled to avoid unexpected behaviors!

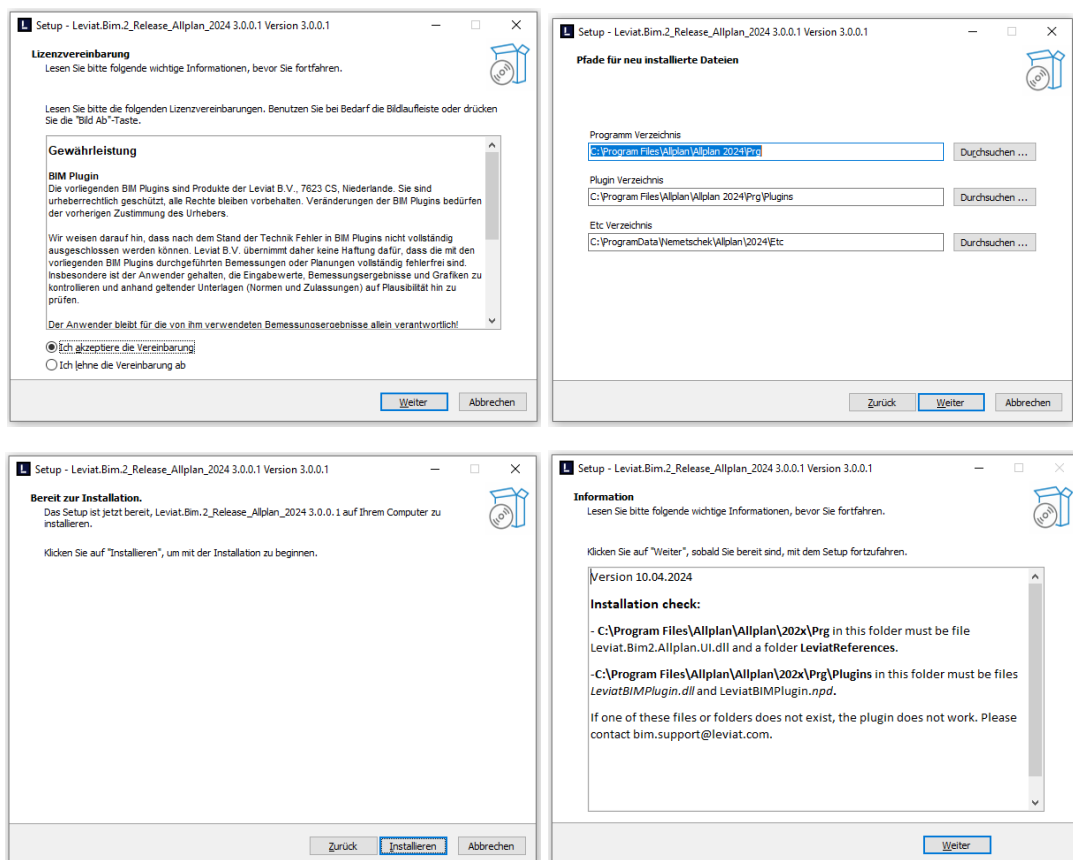
To start the installation, double-click on the installation file. Here the example for version 3.x.x.x.. For higher versions there might be small differences.

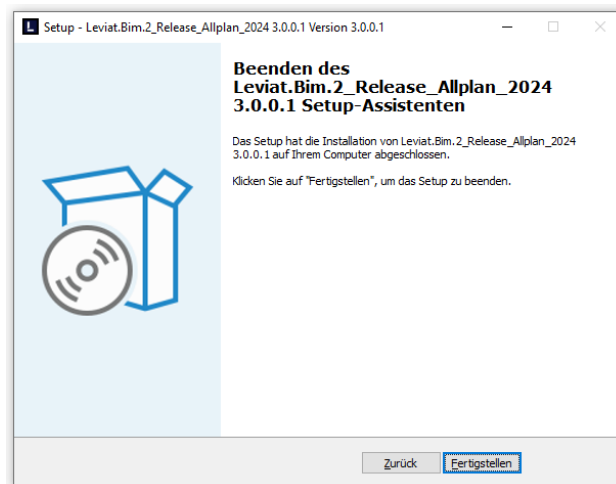
 **Leviat.Bim.2_Release_Allplan_2024_v3.0.0.1_Installer.exe**

A pop-up will appear asking for administrative rights. Once you have done so, select the language for the installation process in the following window.



Follow the next steps by clicking 'Next' and 'Install'. Everything will be installed correctly when you click "Finish" in the last window.





Getting started with the Plugin

The Leviat BIM Plugin can be found in the ENGINEERING and PRECAST module (as in the previous version).

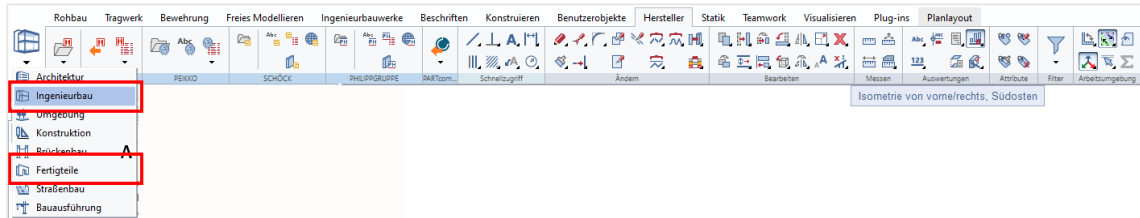


Figure 1 – Leviat BIM Plugin in the Engineering or Precast module



Figure 2 – Plugin within the Leviat menu

The plugin is opened in the side panel.

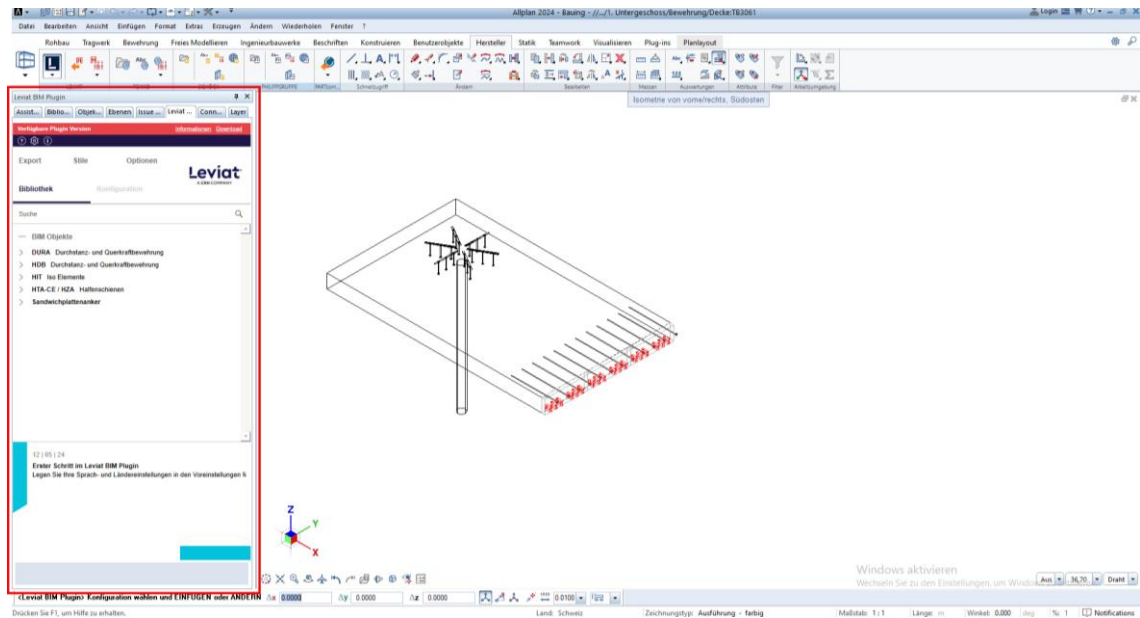


Figure 3 – BIM Plugin visible in the side panel

Navigating in the Plugin

There are 5 main tabs in the plugin:

- LIBRARY, where the user can browse the range of products integrated in the plugin.
- CONFIGURATION, where the user can configure the types of a selected product.
- EXPORT, where the user can export Leviat BIM objects in lists.
- STYLES, where the user can define graphical representation using Allplan functions.
- OPTIONS, where the user can set the “Einbauteilkatalog”-reference for the precast module and link different Level of Geometry (LOG) to specific scales.

There are 3 additional tabs:

- HELP, where the user can check the basic instructions on how to work with the plugin and can create a bug report.
- SETTINGS, where the user can change the project environment.
- INFO, where the user can check additional information about the plugin, such as the current version, warranty information and data protection policy.

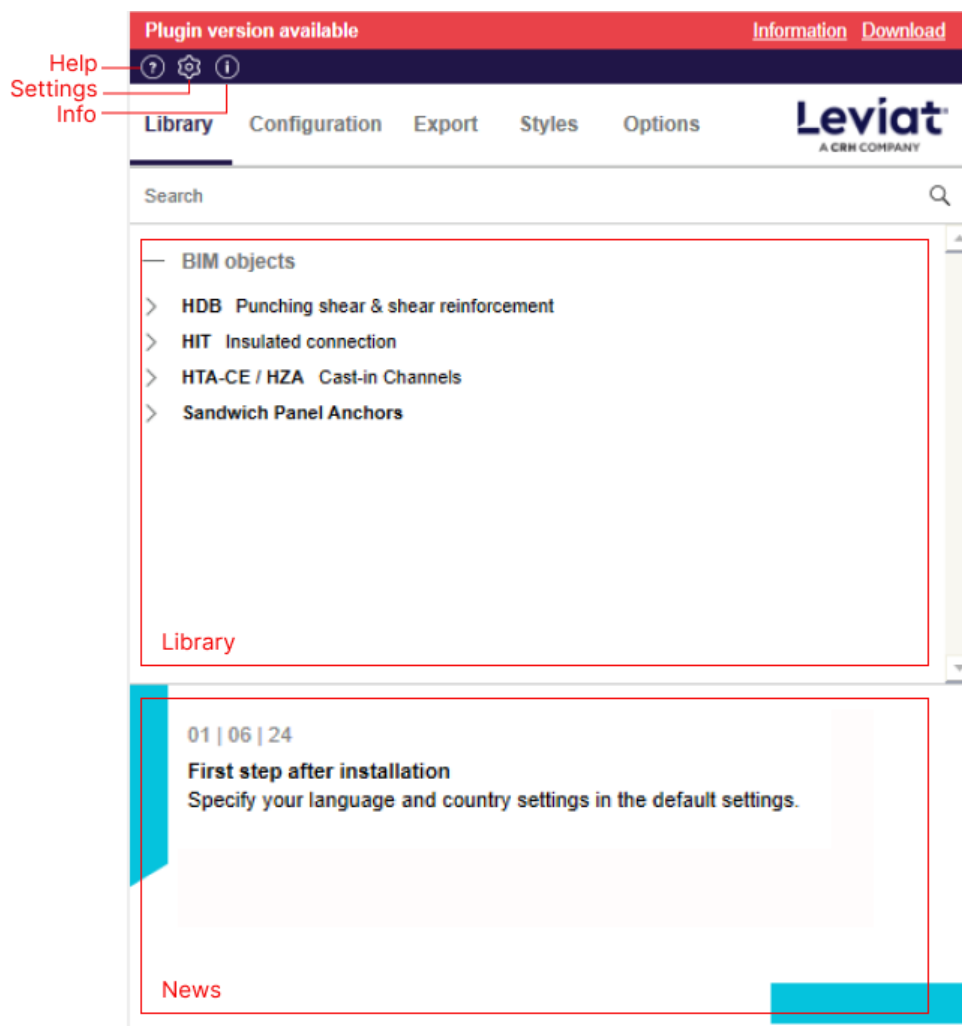


Figure 4 – Main plugin view

First steps – Plugin project environment settings

The SETTINGS TAB allows the user to configure the preferred project environment. The user can select the PLUGIN LANGUAGE as well as the COUNTRY in which the project is being designed.

Note: The selected COUNTRY (LANGUAGE) affects the product range, product data and bill of material. This language will be applied to the attributes of the BIM objects.

In the DEFAULT FOLDERS, the user can set the folder to which the lists will be exported. This folder can be changed by clicking on the path. It can be opened by clicking on top of the folder symbol.

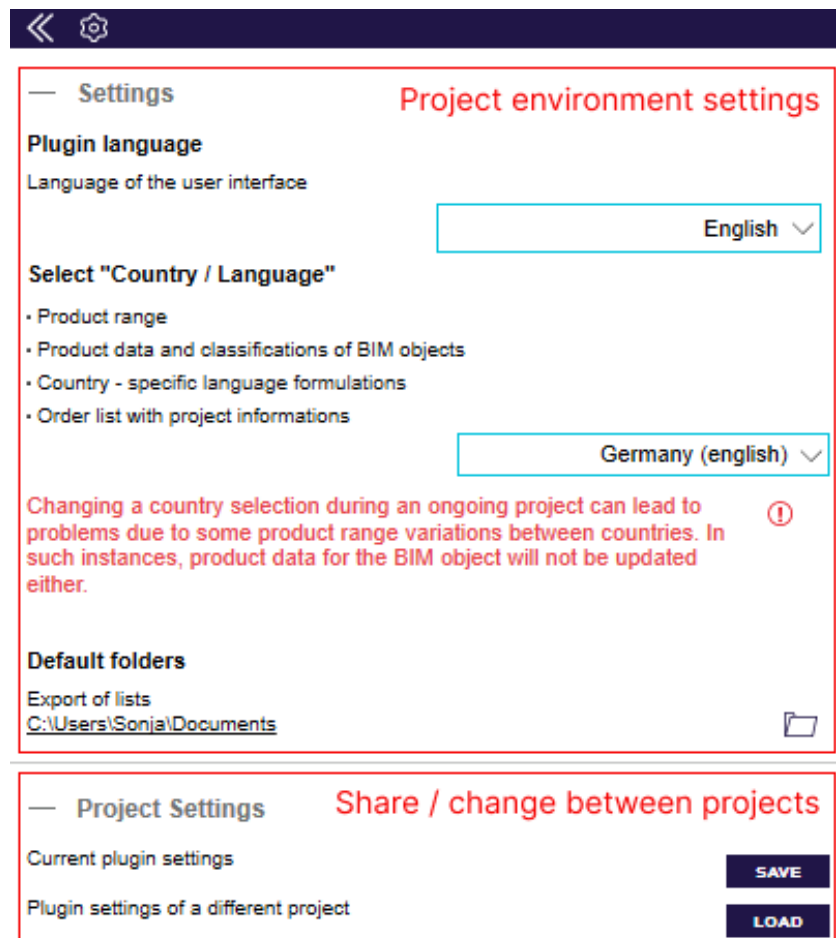


Figure 5 – Settings tab

The PROJECT SETTINGS allow the user to save/load the settings. This allows you to move between projects or share settings.

Saved are the project environment settings, STYLES and OPTIONS.

Configuring a product

The CONFIGURATION tab opens when a product is selected from the LIBRARY. This can be done either by double clicking on the product in the library or by pressing the CONFIGURE button at the bottom of the LIBRARY tab.

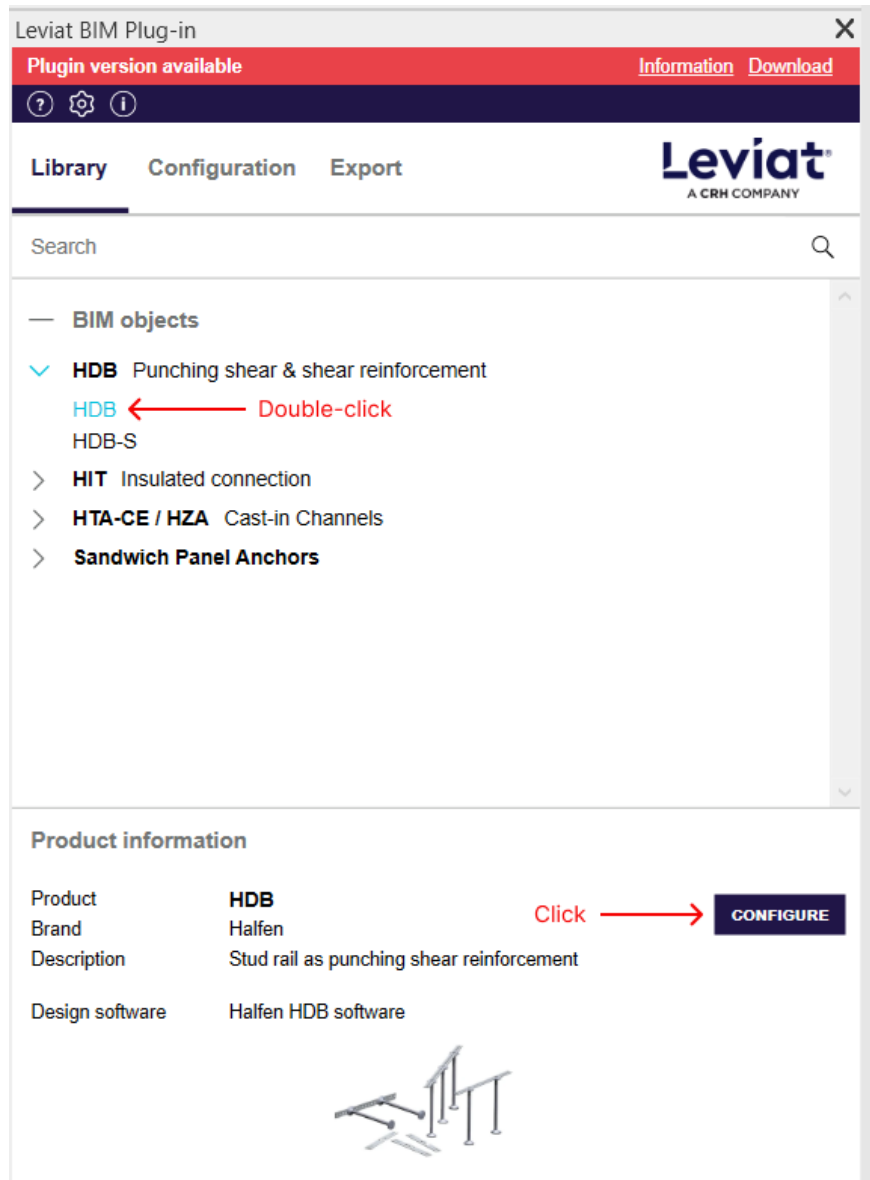


Figure 6 – Selecting a product to configure

In the CONFIGURATION tab, the user can configure the product to obtain the desired type from the database.

The user has 2 ways to select a product type:

1. Copy a product code directly into the PRODUCT CODE text box and press ENTER.
For some products such as **DURA Steelheads** only this option is available.

Any code can be inserted within a product. The product configuration will be correct, although the product selection fields may not be adjusted correctly.

2. In the product selection area, select the desired values for each available property, depending on the product. Once all the properties have a value, the product code is automatically filled in.

The screenshot displays the 'Configuration' tab in the Leviat software interface. The main section is titled 'Geometrical configuration HDB / HDB-S'. It includes a 'Product code' field with the value 'HDB-10/155-2/220' and a 'Clear configuration' button. Below this is the 'Product Selection' section, which contains a 'Type' dropdown set to 'HDB', a 'System elements with 2 or 3 studs' toggle, and several dropdown menus for 'Stud diameter' (10 mm), 'Stud height' (155 mm), 'Number of studs' (2), and 'Element length' (220 mm). The 'Positioning (optional)' section features three 3D models of stud placement, 'Offset $\Delta x, \Delta y, \Delta z$ ' fields (all set to 0 mm), 'Product orientation' (Rotation around y-axis, set to 0°), and a 'Positioning options' button. The 'Product data configuration (optional)' section includes fields for 'Approvals and certifications' (ETA), 'Position', 'Comments to Leviat', 'Your reference', 'Classification', 'NL-SIB code', and 'NL-SIB description'. Red annotations point to specific features: 'Clear configuration', 'Product Code', 'Product Selection', 'Positioning options', 'Optional parameters', and specific notes for the 'Approvals and certifications' field: '@1412 wird in Excel Export und Report übernommen', 'Für Sonderwünsche: @1216 wird in Excel Export und Report übernommen', and 'Für die ERP Nummer: @307'. At the bottom are 'INSERT' and 'MODIFY' buttons.

Figure 7 – Configuration tab

The user can also add custom parameter values under the PRODUCT DATA CONFIGURATION section. These are optional parameters. Note: These attributes should also only be modified using the Plugin.

Delete a configuration or individual values

Click or double-click on the cross of DELETE CONFIGURATION (see Figure 8) to generate a new configuration of the same product.

Select DELETE SELECTION from the pull-down menu to get back all options for an already defined value,

Note: If there are dependencies between different properties, you may need to DELETE the entire CONFIGURATION.

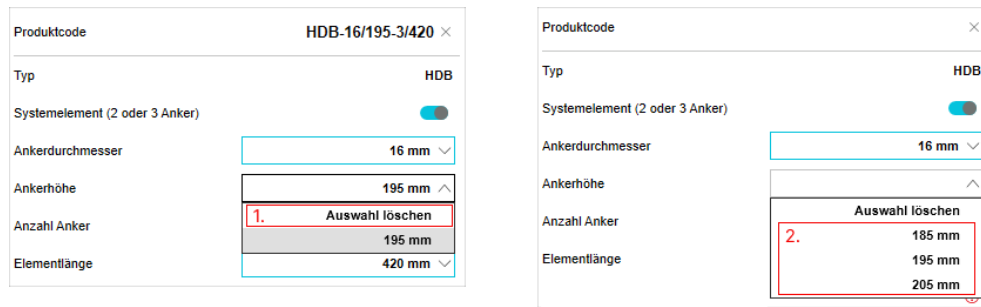


Figure 8 – Changing a single value of a configuration

Options for inserting a product

To insert an object into the model, the user must press the INSERT button in the CONFIGURATION tab.

Insert with direct rotation and/or linear placement

- Press the INSERT button.
- Hold down the CTRL key on the keyboard and place the object by clicking the left mouse button.
- Define the rotation with a second click.

Note: If the second click is further away, several objects will be placed in a line.

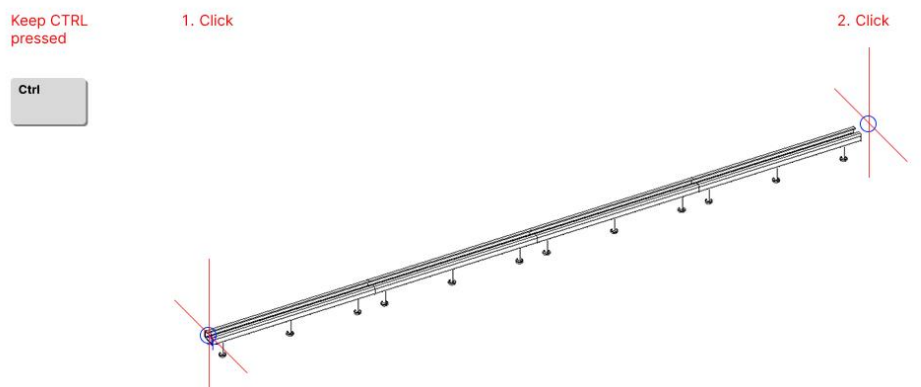


Figure 9 – Insert while pressing CTRL-key

Positioning

There are additional optional parameters that the user can choose from before inserting a product, under the “Positioning (optional)” part.

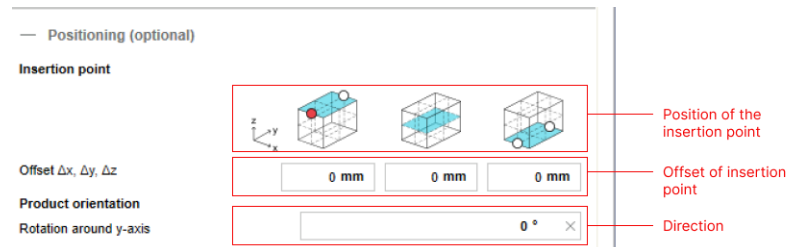


Figure 10 – Positioning options

The INSERTION POINT defines the position of the object that will be its origin at the moment the object is placed in the model. The possible insertion points are shown as a white circle in the 3 figures representing each plane of the product (top, middle or bottom). It is highlighted in red once a product has been configured. Depending on the product you have different options for changing it.

OFFSET moves the object in x, y or z direction according to its origin/insertion point. Negative values are allowed. This function allows to place products easily e.g. placing an object with a concrete cover.

ROTATION AROUND Y-AXIS rotates the product at any angle. It can help pre-casters to place all products in the opposite direction by rotating a product by 180°.

Important note: The position does not work after being inserted i.e. the MODIFY function does not work with the position.

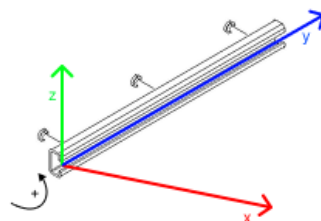


Figure 11 – Rotation around y-Axis – Example with 90°

New visualization menu

In the latest plugin version, there is a new ALLPLAN visualization menu. This will allow the user to place BIM objects that have different states.



Figure 12 – New visualization menu

For example, the rebend connectors can be placed as either contained (image on the left) or open rebar (image on the right), depending on whether the switch is set to TRUE or FALSE.

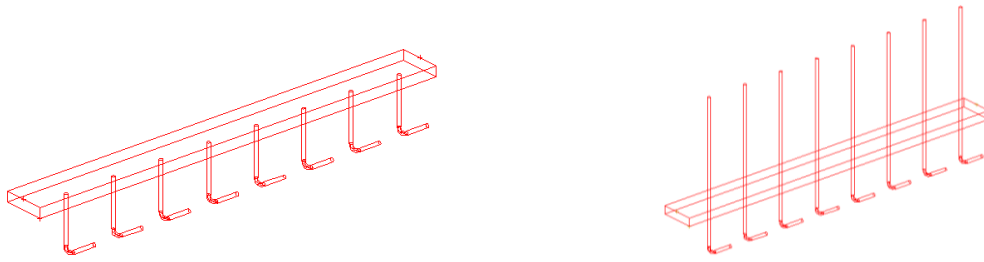


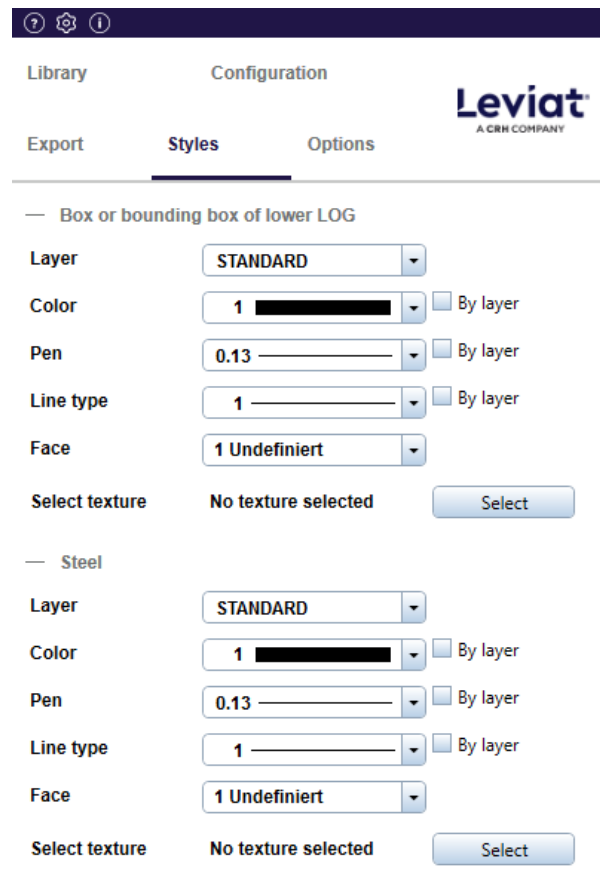
Figure 13 – BIM object states

Setting STYLES

The STYLES and OPTIONS tabs are only active before inserting a product.

Note: Changes will be applied to all products inserted afterwards! Objects already placed will not be affected by changes.

Styles settings are stored locally on your PC. Set them once according to your standards.



The screenshot shows the 'Configuration' dialog box with the 'Styles' tab selected. The dialog has a top bar with icons for help, settings, and information. Below the bar are tabs for 'Library', 'Configuration', 'Export', 'Styles', and 'Options'. The 'Styles' tab is active, showing settings for two categories: 'Box or bounding box of lower LOG' and 'Steel'. Each category has a list of properties: Layer, Color, Pen, Line type, Face, and Select texture. The 'Layer' and 'Color' properties are set to 'STANDARD' and '1' respectively. The 'Pen' and 'Line type' properties are set to '0.13' and '1' respectively. The 'Face' property is set to '1 Undefiniert'. The 'Select texture' property is set to 'No texture selected' with a 'Select' button next to it. The 'By layer' checkbox is checked for all properties.

Category	Property	Value	By layer
Box or bounding box of lower LOG	Layer	STANDARD	<input checked="" type="checkbox"/>
	Color	1	<input checked="" type="checkbox"/>
	Pen	0.13	<input checked="" type="checkbox"/>
	Line type	1	<input checked="" type="checkbox"/>
	Face	1 Undefiniert	<input checked="" type="checkbox"/>
	Select texture	No texture selected	<input type="checkbox"/>
Steel	Layer	STANDARD	<input checked="" type="checkbox"/>
	Color	1	<input checked="" type="checkbox"/>
	Pen	0.13	<input checked="" type="checkbox"/>
	Line type	1	<input checked="" type="checkbox"/>
	Face	1 Undefiniert	<input checked="" type="checkbox"/>
	Select texture	No texture selected	<input type="checkbox"/>

Figure 14 – Edit in Plugin

Setting OPTIONS (Catalogue reference / LOG to scales)

Note: Changes will be applied to all products inserted afterwards! Objects already placed will not be affected by changes.

Option settings are stored locally on your PC. Set them once according to your standards.

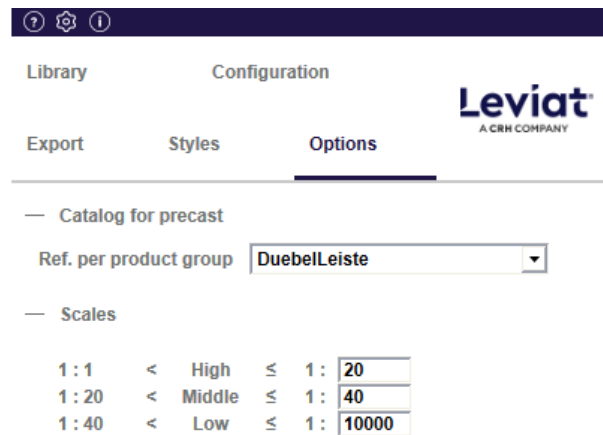


Figure 15 – Options

Catalogue references for precast

The reference can be set for each product group.

LOG to scales

2 or 3 different levels of geometry (LOG) are defined for each Leviat product. Here you can link them to a specific scale.

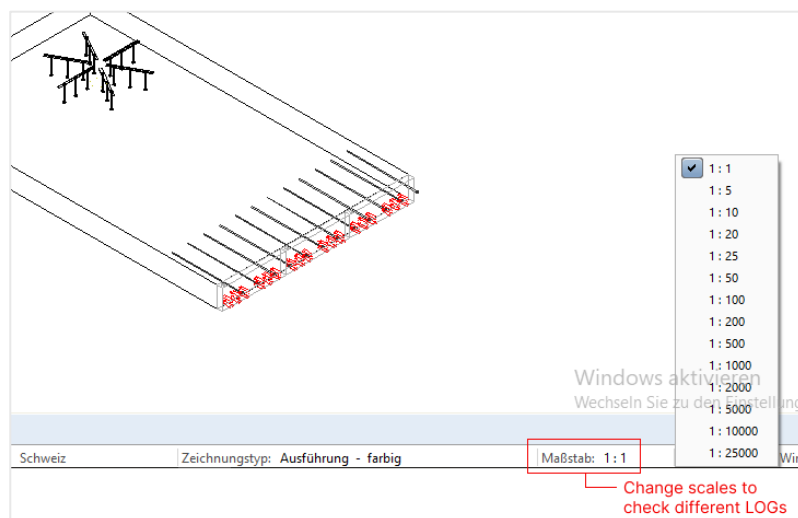


Figure 16 – ALLPLAN scales

Open the Plugin in edit mode

Allplan allows the user to edit objects using the “Edit” mode. To use it, there are two options.

Open the Plugin from Leviat menu bar

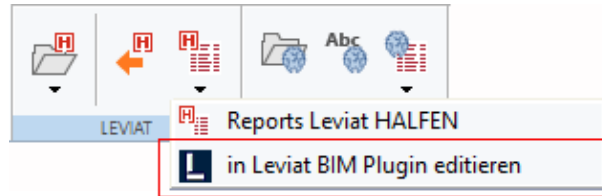


Figure 17 – Menu bar in ENGINEERING and PRECAST module

Open plugin from context menu

1. Hover over a Leviat product and click with the RIGHT BUTTON of the mouse for the context menu. Select EDIT IN LEVIAT BIM PLUGIN. The Leviat BIM Plugin opens and the CONFIGURATION tab displays the selected product type and its attributes.

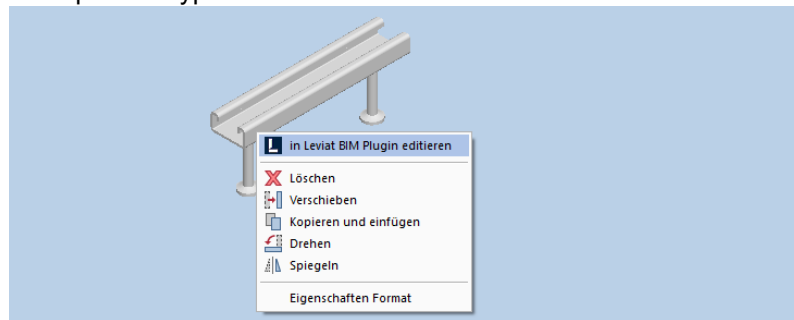


Figure 18 – Edit in Plugin

2. Change the configuration.
3. Press the MODIFY button and the selected object will be modified. Make another selection and the changes will be applied.

Checking Leviat product attributes

Note: These attributes should also only be modified using the Plugin, if needed.

Punkt-Einbauteil		
Klassifizierung		
Ab	IFC-Objektyp	IfcDiscreteAccessory
123	Tragendes Bauteil	<input checked="" type="checkbox"/>
Material/Qualität		
Ab	Material	LEVIAT Ribbed or smooth reinforcing steel bars of strength class B...
Ab	Bezeichnung	HDB-S-14/125-2/200
Basis		
123	Abrechnungsart	Stck
0,0	Faktor	1.000000
Ab	Langtext	HDB-S-14/125-2/200
Geometrie		
ID		
Profile		
0,0	Durchmesser (d)	14.00 mm
Sonstige		
123	Anzahl der Eisenabstände	2
Ab	Artikelnummer	
Ab	Beschreibung	Stud rail as shear reinforcement
Ab	Copyright	Leviat
Ab	FunktionHierarchisch	Punching shear reinforcement
Ab	Hersteller	Leviat
Ab	Homepage Hersteller	https://www.leviat.com/de-de
Ab	Katalogsreferenz	Duebelliste
Ab	Kurztext	HDB-S
Ab	Marke	Halfen
Ab	OmniClass-Nummer	23-13 31 21 12
Ab	OmniClass-Titel	Reinforcement components
123	Positionsnummer	1
Ab	Produktdaten-Link	https://www.halfen.com/en_DE/product-ranges/concrete/reinforce
Ab	Typ	HDB-S
Ab	Uniclass 2015 Beschreibung	Prefabricated reinforcement
Ab	Uniclass 2015 Code	Pr_20_96_71_67
Ab	Untertyp	System Element
Ab	Version	3.0.0.1_AllPlan_DE_16-02-2024_638531031683544468
Ab	Zertifikate	DIBt

Figure 19 – Attributes

Here is how the user can check the attributes according to the version:

- Allplan 2024/2025: Left click on a Leviat product to display the attributes in the Properties tab.
- Allplan 2023: Select MODIFY ATTRIBUTES and click on a Leviat product.

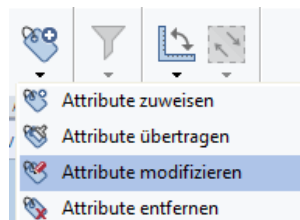


Figure 20 – Modify attributes

EXPORT: Creating a list of products in Excel

The EXPORT tab allows the user to generate an Excel list of selected Leviat objects in the model. The Excel templates vary according to the selected project environment.

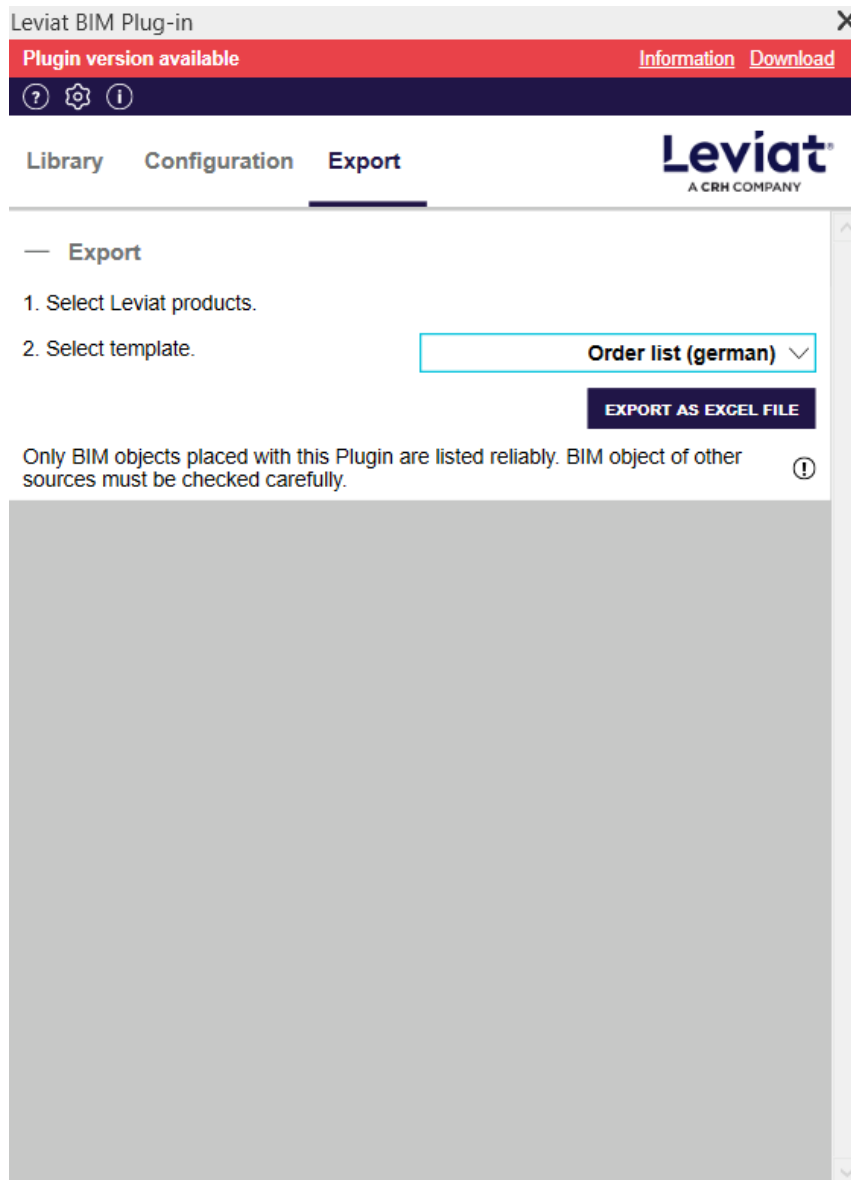


Figure 21 – Export tab

ALLPLAN Reports

Stückliste Leviat BIM Plugin				
Bauvorhaben Ersteller: Sonja Datum: 12.06.2024 Hinweis:				
Pos.	Anzahl	Bezeichnung	Artikelnr. / Plantext / Dim.text	Kommentare
Durchstanz- und Schubbewehrung				
01	1	DURA 100/35-BF1.N26.U	6100000013	
02	1	DURA 100/35-BF1.N26.U	6100000013	Info für Leviat
03	1	DURA-45L hk=220mm	6100000018	
04	1	HDB-25/605-4/1045 (210/230/230/300)	6100000069	
Balkonanschlüsse				
05	2	HIT-HP MVX-0502-18-100-30	0930.210	
Verankerungstechnik				
06	1	HTA-CE 38/17 A4-250/3		
07	1	HTA-CE 38/17 FV-250/3		
Sandwichplattenverbindungen				
08	1	SP-FA-1-200-160-A4	0771.010-00024	
09	1	SP-SPA-1-05-160-A4	0270.010-00001	
10	1	SP-SPA-2-09-300-A4	0271.010-00113	
11	1	SP-SPA-A-03-140-A4	0272.010-00002	
12	1	SP-SPA-FLEX-04-310-A4	1000209761	
Leviat GmbH Liebigstrasse 14 40764 Langenfeld Telefon +49 2173-970 0 info.de@leviat.com www.leviat.com				1/1

Figure 22 – Leviat Report

You will also receive various Allplan reports with the installation file. Copy these to the following folder:

Allplan 2023 C:\ProgramData\Nemetschek\Allplan\2023\Etc\reports\eng\Fixtures\Leviat

Allplan 2024 C:\ProgramData\Nemetschek\Allplan\2024\Etc\reports\eng\Fixtures\Leviat

Allplan 2025 C:\ProgramData\Nemetschek\Allplan\2025\Etc\Reports\eng\Fixtures\Leviat

Then select the reports via the Leviat menu bar in the ENGINEERING and PRECAST module. Click on the selected report to select the folder above and choose a report.

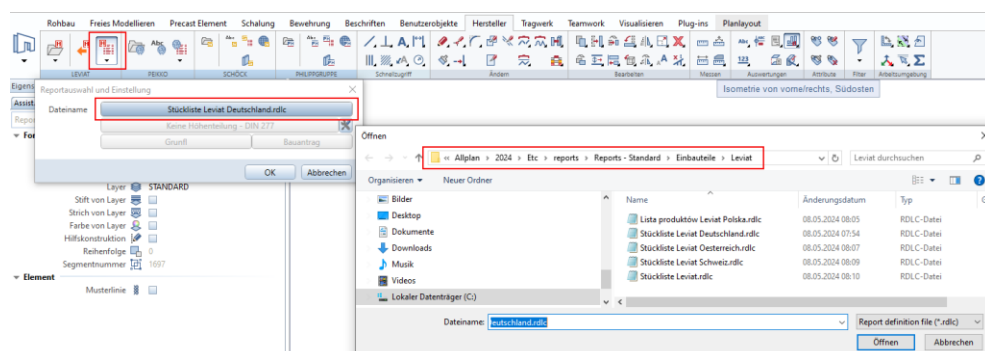


Figure 23 – Select Leviat report and adapt folder path

Advanced installation options

Adjust the path for locally stored plugin data

This may be necessary if the plugin interrupts the update process at plugin startup. Adjust then the path for locally stored plugin data. You will need permissions to write and delete data in the selected folder.
Note: OneDrive or other folders that require you to close a pop-up when deleting or performing similar actions may cause problems or fail to update later.

Open the Registry editor on your PC. You might need to contact your IT Administrator for that action.

1. Open the following folder: Computer\HKEY_CURRENT_USER\SOFTWARE\Pro Engineers\Leviat\BIM-Plugin
2. Right click on "AppDataPath" and select "Change".
3. Change the path to a folder where you have the rights to read and write data.



Figure 24 – Paths in registry

Customized parameter mapping

If you are interested to map product data to another parameter or add values, please contact bim.support@leviat.com.

Silent installation

If you are interested in a silent installation option, please contact bim.support@leviat.com. STYLES and Setting OPTIONS (Catalogue reference / LOG to scales) can be predetermined.

Errors and known issues

Plugin update failed

If you want to open the Plugin and get this error message, follow these instructions: Adjust the path for locally stored plugin data.

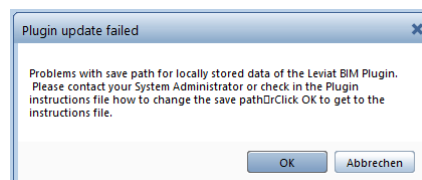


Figure 25 – Error while starting up the plugin

Then, restart ALLPLAN.

Missing credentials issue

In a recent update (version 4.0.0.1), and due to an upgrade on the plugin security, some clients have been facing an issue when trying to configure a product in the plugin (see image below).

This issue should be fixing from version 4.0.0.2 onwards. If not, please contact bim.support@leviat.com.

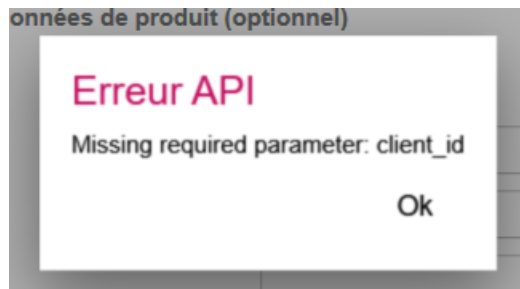


Figure 26 - Pop-up-Problem mit fehlenden Anmeldeinformationen