

ALLPLAN Leviat BIM Plugin instructions

Plugin version: 4.x for Allplan 2023 / Allplan 2024 / Allplan 2025

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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.



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.

Benutzerkontensteuerung	×	
Möchten Sie zulassen, dass durch diese App Änderungen an Ihrem Gerät vorgenommen		
werden?		Setup-Sprache auswählen X
Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 Setup Verifizierter Herausgeber: Leviat AG Dateiursprung: Festplatte auf diesem Computer Weitere Details anzeigen		Wählen Sie de Sprache aus, die während der Installation benutzt werden soll: Deutsch
Ja Nein		

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

Setup - Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 Version 3.0.0.1 — X	Setup - Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 Version 3.0.0.1 - X
Lizenzvereinbarung Lesen Sie bitte folgende wichtige Informationen, bevor Sie fortfahren.	Pfade für neu installierte Dateien
Lesen Sie bitte die folgenden Lizenzvereinbarungen. Benutzen Sie bei Bedarf die Bildaufleiste oder drücken Sie die "Bild Ab"-Taste.	
Gewährleistung BIM Plugin Die vorliegenden BM Plugins sind Produkte der Leviat B.V., 7623 C.S., Niederlande. Sie sind untbearrechtlich geschlützt, alle Rechte bieben vorbehalten. Veränderungen der BIM Plugins bedürfen der vorherigen Zustimmung des Urnebers. Wir weisen darauf hin, dass nach dem Stand der Technik Fehler in BIM Plugins nicht vollständig ausgeschbasen werden klönen. Leviat B.V. übernimmt daher kiehe Haugins nicht vollständig ausgeschbasen werden klönen. Leviat B.V. übernimmt daher kiehe Planungen volständig fehlerfrei sind. Insbesondere sit der Anvender plantlen, die Eingehalten, die Eingehaberete, Bemessungereptonse und Grafken zu kontrolieren und anhand getender Unterlagen (Normen und Zulassungen) auf Plausbillität hin zu prüfen. Der Anwender bleibt für die von ihm verwendeten Bemessungeroensee allein verantwortlicht	Program Verzednis Dugdsuchen Plugn Verzeichnis Dugdsuchen C:Program Files/Milplan/Alplan 2024/Pro/Plugins Durdsuchen Etc Verzeichnis C:ProgramData/Vemetschek/Alplan/2024/Etc Durdsuchen
Ech glaceptere de Vereinbarung Otch Jehne die Vereinbarung ab	
<u>W</u> eiter Abbrechen	Zurück Weiter Abbrechen
 Setup - Leviat.Birn.2_Release_Allplan_2024 3.0.0.1 Version 3.0.0.1 — X Bereit zur Installation. Das Setup ist jetzt bereit, Leviat.Birn.2_Release_Allplan_2024 3.0.0.1 auf Brrem Computer zu installeren. Kicken Sie auf "Installeren", um mit der Installation zu beginnen. 	Setup - Leviat.Bim2_Release_Allplan_2024 3.0.0.1 Information Lesen Sie bitte folgende wichtige Informationen, bevor Sie fortfahren. Version 10.04.2024 Installation check: - C:\Program Files\Allplan\Allplan\202x\Prg in this folder must be file Leviat.Bim2.Allplan\JI.II and a folder LeviatReferencesC:\Program Files\Allplan\JI.II and a folder LeviatBIMPlugin.dl and LeviatBIMPlugin.mpd. If one of these files or folders does not exist, the plugin does not work. Please contact bim.support@leviat.com.
Zurück Installeren Abbrechen	Weiter





Setup - Leviat.Bim.2_Release_Allp	Setup - Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 Version 3.0.0.1								
	Beenden des Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 Setup-Assistenten Das Setup hat die Installation von Leviat.Bim.2_Release_Allplan_2024 3.0.0.1 auf firmer Computer abgeschlossen. Kicken Sie auf "Fertigstellen", um das Setup zu beenden.								
Zurück <u>F</u> ertigstellen									





Getting started with the Plugin

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

	Rohbau	Tragwerk	Bew	ehrung	Fre	ies Mo	odellieren	Ingenie	eurbauwerke	Beschrift	en Konstr	uieren	Benutzer	objekte	Herstell	er :	Statik	Team	work	Visual	isieren	Plug-ir	ns Pl	anlayout			
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<u>.</u> 01	ngebung																										
0⊾ Ка	nstruktion																										
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D Fe	rtigteile																										
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Figure 1 – Leviat BIM Plugin in the Engineering or Precast module

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Datei	Bearbeiten Ansicht Ein	fügen Forma	at Ext	ras Erzeugen	Änd	ern Wiederho	len Fer	nster ?								
	Rohbau Tragwerk B	ewehrung	Freies N	Aodellieren I	ngenie	urbauwerke	Beschrift	en Konstruieren	Benutzero	bjekte	Hersteller	Statik	Teamwork	Visualisierer	n Plug-ir	ns Planlayc
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	HAI FEN Einhauteil ve	rlegen		SCHÖCK	F	HILIPPGRUPPE	PARTcom	Schnellzugriff		Ände	m		Bearbeit	en	Messen	Auswertung
	Leviat BIM Plugin														Isometrie	von vorne/r

Figure 2 – Plugin within the Leviat menu

The plugin is opened in the side panel.



Figure 3 – BIM Plugin visible in the side panel

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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.

	Plugin ver	rsion available				Information	Download
Help	0\$)					
Info —	Library	Configuration	Export	Styles	Options		
	Search						۹
		bjects	hear rainfor	ament			
		nsulated connection	near reinion	emeni			
	> HTA-C	CE / HZA Cast-in C	hannels				
	> Sandy	wich Panel Anchors	8				
	Library	1					
							· ·
	01 0	06 24					
	First	step after install	and count	v settings i	n the default se	ttinas	
	opot	ing your language	and count	y settings i		ungo.	
	Nowe						
	news						

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.

≪ ◊	
— Settings Pro	oject environment settings
Plugin language	
Language of the user interface	
	English \lor
Select "Country / Language"	
Product range	
Product data and classifications of BIM obje	cts
Country - specific language formulations	
 Order list with project informations 	
	Germany (english) 🗸
Changing a country selection during an oppoblems due to some product range var such instances, product data for the BIM either.	ongoing project can lead to iations between countries. In object will not be updated
Default folders	
Export of lists <u>C:\Users\Sonja\Documents</u>	
- Project Settings Share /	change between projects
Current plugin settings	SAVE
Plugin settings of a different project	LOAD

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.

Leviat BIM P	lug-in	×
Plugin versi	o n available	Information Download
🤉 🕸 🛈		
Library	Configuration Export	Leviat a CRH COMPANY
Search		Q
— BIM o	bjects	
V HDB	Punching shear & shear reinforcemen	t
HDB	Double-click	
> HIT In	sulated connection	
> HTA-C	E / HZA Cast-in Channels	
> Sandw	ich Panel Anchors	
Product in	formation	
Product	HDB	
Brand	Halfen Stud seil es supebing obser sei	
Description	Stud rail as punching shear rei	morcement
Design softw	are Halfen HDB software	
		Ţ

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.

Library Configuration Export §		
— Geometrical configuration HDB / HDB	I-S	
Product code	HDB-10/155-2/220	Product Code
Туре	HDB	
System elements with 2 or 3 studs	•	
Stud diameter	$-$ 10 mm ${\sim}$	
Stud height	155 mm 🗸	Product Selection
Number of studs	2 ∨	
Element length	220 mm 🗸	
Insertion point Σ Offset Δx, Δy, Δz Product orientation Rotation around y-axis	0 mm 0 mm 0 mm 0 ° ×	Positioning options
 Product data configuration (optional) 		Optional parameters
Approvals and certifications	ETA	@1412 wird in Excel Export
Position		und Report übernommen
		Für Sonderwünsche: @1216 wird in Excel Export und Report übernommen
Classification		Für die ERP Nummer: @307
NL-SfB code	×	

Figure 7 - Configuration tab

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

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.





Produktcode	HDB-16/195-3/420 $ imes$	Produktcode	×
Тур	HDB	Тур	HDB
Systemelement (2 oder 3 Anker)	•	Systemelement (2 oder 3 Anker)	-
Ankerdurchmesser	16 mm $ \smallsetminus $	Ankerdurchmesser	16 mm $ imes $
Ankerhöhe	195 mm 🔿	Ankerhöhe	^
Anzahi Anker	1. Auswahl löschen	Anzahl Anker	Auswahl löschen
Alizalii Alikei	195 mm		2. 185 mm
Elementlänge	420 mm 🗸	Elementlänge	195 mm
			205 mm



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°.



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



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.

() 🕸 ()							
Library	Configu	ration	Loviet				
Export	Styles	Options					
- Box or bounding box of lower LOG							
Layer	STANDA	RD	•				
Color	1		 By layer 				
Pen	0.13 —		 By layer 				
Line type	1-		 By layer 				
Face	1 Undef	iniert	•				
Select texture	No textu	re selected	Select				
— Steel							
Layer	STANDA	RD	•				
Color	1		 By layer 				
Pen	0.13 —		 By layer 				
Line type	1 —		 By layer 				
Face	1 Undef	iniert	•				
Select texture	No textu	re selected	Select				

Figure 12 – Edit in Plugin

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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.

🤊 🕸 🛈			
Library	Con	Loviat	
Export	Styles	Options	A CRH COMPANY
— Catalog Ref. per pr	for precast roduct group	DuebelLeiste	•
— Scales 1:1 1:20 1:40 	< High < Middle < Low	≤ 1: 20 ≤ 1: 40 ≤ 1: 10000	
	Figu	ure 13 – 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 14 – ALLPLAN scales

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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





Open plugin from context menu

 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 16 – 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

	Ab	IFC-Objekttyp	IfcDiscreteAccessory
	123	Tragendes Bauteil	
-	Materia	al/Qualität	
	Ab	Material	LEVIAT Ribbed or smooth reinforcing steel bars of strength class-
	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
+	Geome	trie	
+	ID		
Ξ	Profile		
	0,0	Durchmesser (d)	14.00 mm
-	Sonstig	je	
	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	DuebelLeiste
	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/reinfore
	Ab	Тур	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

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

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 18 – 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.

Leviat BIM F	Plug-in			×
Plugin versi	ion available		Information 1	<u>Download</u>
? 镎 ()			
Library	Configuration	Export		iat [®]
— Ехро	rt			
1. Select Le	eviat products.			
2. Select te	mplate.		Order list (germa	in) \vee
			EXPORT AS EXCEL	FILE
Only BIM o sources mu	bjects placed with th	nis Plugin ar fullv	e listed reliably. BIM object of other	
				\sim

Figure 19 - Export tab





ALLPLAN Reports

Stüc	kliste L	eviat BIM Plugin				•
Bauvor Erstelle Datum: Hinweis	haben r: S 1 s:	onja 2.06.2024				_
Pos.	Anzahl	\$	Artikelnr. / Plantext / Dim.text	Kommentare		_
Durchs	stanz- un	d Schubbewehrung				
01	1	DURA 100/35-BF1.N26.U	610000013			
02	1	DURA 100/35-BF1.N26.U	610000013	Info für Leviat		Kommentare bei den
03	1	DURA-45L hk=220mm	610000018		ſ	binzufügen
04	1	HDB-25/605-4/1045 (210/230/230/300	610000069			ninzurugen.
Balkor	nanschlü	sse				
05	2	HIT-HP MVX-0502-18-100-30	0930.210			
Veran	kerungs	technik				
06	1	HTA-CE 38/17 A4-250/3				— Produkte sind nach
07	1	HTA-CE 38/17 FV-250/3				Produktgruppen geglied
Sandw	vichplatte	enverbindungen				
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				1/1	1/1
Liebigs	trasse 14	40764 Langenfeld				
Telefon	+49 2173	3-970 0				Leviat Kontaktangaben
info.de	@leviat.co	om www.leviat.com			version: ALLPLAN 05/24	VZ4

Figure 20 - 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 21 - Select Leviat report and adapt folder path

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only change this part of the 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.

		only change this part of the path
ab AppDataPath	REG_SZ	C:\Users\User_\AppData\Roaming\Leviat\BIM-Plugin\X.x.x.x
ab CustomerDataPath	REG_SZ	C:\Users\User \AppData\Roaming\Leviat\BIM-Plugin\Customer

Figure 22 – 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 <u>bim.support@leviat.com</u>. STYLES and Setting OPTIONS (Catalogue reference / LOG to scales) can be predetermined.

Errors / warnings

Plugin update failed

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

Plugin update failed	×	
Problems with save path for locally stored data of the Leviat BIM Plugin. Please contact your System Administrator or check in the Plugin instructions file how to change the save pathDrClick OK to get to the instructions file.		
OK Abbrechen		

Figure 23 – Error while starting up the plugin

Then, restart ALLPLAN.



