Linc Furniture Pty Ltd

Autodesk Revit Families User Guide



Linc Furniture Pty Ltd | www.lincfurniture.com.au

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1.0 Product Information

The Autodesk Revit product files provided by Linc Furniture Pty Ltd for its Stowmate BagTrac WM system and Safehook products are intended for reference and conceptual use. These files are made available to assist users in incorporating our products into their designs. However, it is important to note the following:

- Accuracy and Verification: While we strive to provide accurate and up-to-date Autodesk Revit files, it is crucial that users independently verify the dimensions, placement, and suitability of the Stowmate BagTrac WM system and Safehook products within their specific project requirements. Final drawings and designs should always be double-checked to ensure correct placement of hooks in relation to Stowmate rails and to avoid any interference with rail joiners or other components.
- 2. Professional Advice: The Autodesk Revit files are not a substitute for professional advice and expertise. Users should consult with qualified architects, designers, and engineers to ensure compliance with local building codes, regulations, and industry standards. Professional guidance is necessary to address any unique project considerations and to ensure the proper installation and functionality of the Stowmate BagTrac WM system and Safehook products.
- 3. Users assume all risks associated with the use and interpretation of the provided Autodesk Revit files.

Linc Furniture Pty Ltd does not warrant the accuracy, completeness, or fitness for a particular purpose of the Autodesk Revit files and makes no representations or warranties, whether expressed or implied, regarding their use or any specific project outcome.







The following outlines information on the construction of the Linc Furniture Autodesk Revit Families and steps for correct use:

- Built using the Autodesk Revit Metric Speciality Equipment Template.
- Built using Autodesk Revit 2019. Compatible with Autodesk Revit 2019 through to 2024. Autodesk Revit 2024 is the latest version of Autodesk Revit at the time of writing this document.

Two Autodesk Revit Families are available:

Safehook_Linc.rfa

This Autodesk Revit Family includes the following Types:

- Euro V2 Bag Hook
- Ihook Mk2 Bag Hook
- o OZIhook Bag Hook
- OZYhook Bag Hook

Stowmate_WM_BagTrac_Linc.rfa

This Autodesk Revit Family includes the following Types:

- o Euro V2 Bag Hook
- Ihook Mk2 Bag Hook
- OZIhook Bag Hook

IMPORTANT <u>Do not</u> edit any Autodesk Revit Family **Type** based parameters or Instance based parameters, specifically those listed under the '**Other'** group heading as indicated in the following image. Doing so may break the correct operation for each Family Type.

Properties			×
	Stowmate_WM_ Euro V2 Bag Ho		•
Specialty Equ	ipment (1)	~	🔠 Edit Type
Other			*
ActualHook	CentresCalcul	300.0	
EqualHookC	entresCalcon.	300.0	
Hook t		4	
HookCe	red	300.0	
HookCour	okLinc	5	
Joiner/	.ou.	2	
Rai' ,nt1s	tRow<	Select Row : 1st Ro	w
F leight2r	ndRow <gener< td=""><td>Select Row : 2nd Ro</td><td>w</td></gener<>	Select Row : 2nd Ro	w
RailHeight3r	dRow <generi< td=""><td>Select Row : 3rd Ro</td><td>w</td></generi<>	Select Row : 3rd Ro	w

2.0 The Safehook_Linc Revit Family

1. From the Insert tab > Load from Library panel, click Load Family.

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Insert Annotate Analyze	Massing & Site	Collaborate	View	Manage	Add-Ins	Quanti	fication
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oint Coordination Link Link I oud Model PDF Image	Manage Import I Links CAD g		lmport Image	Load Loa Family	id Autodesk Family	Load as Group	Insert from File
		Import	ы		Load from	Library	

2. Browse for the **Safehook_Linc.rfa** file, then click Open.

😫 Load Family						?	×
Look in:	autodesk_F	Revit_2019_Supplied				🗙 📮 Vie	ws 🔻
History History Documents My Computer My Network Favorites Desktop	Name	^ 	*.adsk)	Size 1,536 KB 2,156 KB	Preview)
Too <u>l</u> s 👻					<u>O</u> pen	<u>C</u> ance	

- 3. Open a Floor Plan view.
- 4. From the Architecture tab > Build panel, click Component.





5. From the Modify | Place Component tab, click Place on Vertical Face.



6. From the Properties Type Selector, select a Type.



7. After selecting a Type, enter a value for Elevation from Level. In this example, 700 will be used.



8. Click to place a hook.

Note: In the following example, the Safehooks are fixed to a 100 x 35mm timber batten.





9. Open either an Elevation or 3D view.

Note: In the following image, Safehooks are copied at 300mm centres.







10. To swap to a different hook type, select another hook using the Properties Type Selector.



11. To swap subcomponent colours, select a hook, then click the small browse button associated for each row.



12. To make selecting Linc Furniture colours easy, select Linc Furniture from the Project Materials list. Select a different colour. Continue to select different colours for the remaining subcomponents.





3.0 The Stowmate_WM_BagTrac_Linc Revit Family

1. From the Insert tab > Load from Library panel, click Load Family.

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Modify	Link Revit	Link IFC	Link CAD	Link Topography	DWF Markup		Point Cloud	Coordination Model		Link Image		Import CAD				Load I Family	oad Autodesk. Family	Load as Group	Insert from File
Select 💌						Link							Impo	ort	к		Load from	n Library	

2. Browse for the **Stowmate_WM_BagTrac_Linc.rfa** file, then click Open.

	in: hutodesk_Revit_2019_Supplied		🗸 🔶 🛃 🗙 🛁 Views
<u>C</u>	Name	Size	Preview
2	Safehook_Linc.rfa	1,536 KB	
History	stowmate_WM_BagTrac_Linc.rfa	2,156 KB	
Documents			
My Computer			
2			
My Network			
My Network			
My Network			
My Network Favorites			
	File name: Stowmate_WM_BagTrac_Linc.rfa		

- 3. Open a Floor Plan view.
- 4. From the Architecture tab > Build panel, click Component.





5. From the Modify | Place Component tab, click Place on Vertical Face.



6. From the Properties Type Selector, select a Type.



7. To place the Stowmate rail, click two opposite points. The Stowmate rail will be positioned between the two clicked points. The default height from the floor level will be 700mm.



8. Open either an Elevation or 3D view.





9. To stretch the length of the Stowmate rail, in either a plan or 3D view, click the Stowmate rail, then use the length field and adjust this value, as shown in the example below, or click and drag either end to dynamically adjust the length.





Note: A joiner connecting two rails will be positioned in the middle of the overall rail when both connecting rails are within 3m each in length. For rails over 6m, a joiner is positioned at repeated 3m intervals.

10. To swap to a different hook type, select another hook using the Properties Type Selector.

Modify Pla	ace Component	Placement Plane:	Level : Le
Properties			×
J₽ J	Stowmate_WM_Bag Euro V2 Bag Hook	Trac_Linc	•
Search			٩
Stown	mate_WM_BagTrac_Li	nc	
Euro	V2 Bag Hook		
lhook	: Mk2 Bag Hook		
OZIho	ook Bag Hook		



11. To swap subcomponent colours, select a rail, then click the small browse button associated for each row.

Modify Specialty Equipme	nt	Moves	With Nearby Ele		
Properties			×		
Stowmate_WM Euro V2 Bag Ho		c_Linc	-		
Specialty Equipment (1) V 🗄 Edit Type					
Constraints			*		
Length	3500.0				
Work Plane	Level:	Level 1			
Offset from Host	0.0				
Materials and Finishes					
HookBodyColour	Black_	Safehook_Lii	nc 🔂 🖂 🗋		
HookCollarColour	Sky_Sa	fehook_Linc	0		
HookButtonColour	Navy_S	Safehook_Lir	nc 🗋		

12. To make selecting Linc Furniture colours easy, select Linc Furniture from the Project Materials list:



13. Select a different colour. Continue to select different colours for the remaining subcomponents.





Adjusting Stowmate Rail Properties



The Dimensions group contains properties that control the hook spacing, first and last hook distance from end of rail and rail heights. All values are in millimetres.

An explanation of each property is as follows:

HookCentres

Specifies the distance between hooks. The default is 300. The minimum and maximum distance used is 200 and 1000 respectively, even if the value entered is less than 200 or greater than 1000.

EqualHookCentres

When ticked and based on the value entered for HookCentres, equally spaces the hooks.

ActualHookCentres

Reports the actual calculated hook centres in millimetres. The value reported is read-only i.e. cannot be adjusted. If EqualHookCentres is ticked, this reported value is the calculated hook centres and may be different to what is entered for the HookCentres value.

HookDistanceEndOfRail

Specifies the distance from the end of the rail for the first and last hook. The default is 150. The minimum and maximum distance used is 150 and 200 respectively, even if the value entered is less than 150 or greater than 200.





ActualHookDistanceEndOfRail

Reports the actual calculated hook distance from end of rail. The value reported is read-only i.e. cannot be adjusted.

RailHeight

This is a pick lists that repositions the height of the rail relative to the default rail height. The default rail height is 700 from the floor level.

RailHeight <generic anno<="" th=""><th>Select Row : 1st Row</th><th><u> </u></th></generic>	Select Row : 1st Row	<u> </u>
1stRailHeight700	Select Row : 1st Row	Ö
	Select Row : 2nd Row	*
Image	Select Row : 3rd Row	

2nd Row will move the rail up 500 from the default height. 3rd Row will move the rail up 1000 from the default height (500 between rows).

1stRailHeight700

When unticked, moves the rail down from 700 to 500 from the floor level.

Output Examples







	\$
300.0	
	0
290.9	
150.0	0
. 150.0	
Select Row : 1st Row	
	0
	290.9 150.0 . 150.0





3.1 Creating a Stowmate Schedule

Below are the key steps to create a quantities schedule. The Stowmate family includes several Shared Parameters which we recommend renaming for clarity and an example is provided below. The output includes calculations of the required number of 3m and 1.5m rail lengths.

Note: In the example below, for clarity, the Wall pattern has been hidden. Note the Stowmate rail lengths and hook types used in this example.



1. From the View tab, Create panel, click Schedule/Quantities from the Schedules drop down.

	A	utodesk Rev	vit 2023.1 - L	inc Furnitu.	re_Sample A	utodesk Re	vit Project.rv	rt - Elevati	ion: Sout	th	
View	Manage	Add-Ins	Quantificat	tion Issu	ies BIM In	teroperabili	ty Tools 🛛	CPS Revit	Tools	Data Ex	xchi
} 💙	(1°				E.			°#			E
Section v	on Callout	Views	Elevation	Drafting View	Duplicate View	Legends *	Schedules *	Scope Box	Sheet	View	Tit Blo
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₩ {30)}	📑 Re	ef. Level	1 F	ront	6	Grap	phical Col	umn Scl	nedule	ned

2. For Category, click Specialty Equipment and for Name, enter a schedule name.





3. From Available fields, add the following fields as shown in the example below. Reorder the fields using the Move parameter up and down buttons.

Filds Filter Sorting/Grouping Formatting Appearance Select available fields from: Specialty Equipment ✓ Parameter Name Search: ✓ Parameter Name Search: ✓ Parameter Name Search: ✓ Image Scheduled fields (in order): Keynote Family Level ✓ Manufacturer ✓ Mark ✓ OmniClass Number ✓ OmniClass Title ✓ Panel ✓ Phase Demolished ✓ Type If CBUID fr Type Mark ✓							
Specialty Equipment Parameter Name Search: Filter Available Fields Available fields: Scheduled fields (in order): Family Type Level Manufacturer Mark Model OmniClass Number OmniClass Number OmniClass Title Phase Created Phase Created Phase Created Phase Demolished Type IFC Predefined Type Type IncgUID Type Image			Appearance	Formatting	Sorting/Grouping	Filter	ields
Parameter Name Search:					e <u>fi</u> elds from:	t availabl	Selec
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Available fields: 32 items Image Family Keynote Family Level Family Manufacturer Family Mark Model Omniclass Number NumberOf3mRailLengthsLinc Omniclass Title Panel Phase Created Phase Demolished Type IFC Predefined Type fr Type Incounce fr					<u>m</u> e Search:	neter Na <u>r</u>	Para
Image Family Keynote Family Level Type Manufacturer HookCountSafehookLind Mark NumberOf3mRailLengthLinc Nomdel OmniClass Number OmniClass Title NumberOf15mRailLengthsLinc Panel Image Phase Created Image Phase Demolished Image Type IfCGUID fx Type Inage Image					able Fields	ter Availa	► F
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Level Manufacturer Mark Model OmniClass Number OmniClass Number OmniClass Tite Panel Phase Created Phase Created Pha			- -				
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4. Click the Sorting/Grouping tab. For Sort by, click Type. Tick Blank line so as to create separate rows for each hook type. Tick both Grand totals and Itemize every instance.

Schedule Prope	rties	×
Fields Filter	Sorting/Grouping Formatting Appearance	
Sort by:	Type	
🗌 <u>H</u> eader	Eooter:	
Then by:	(none)	
Heade <u>r</u>	□ Footer: □ Blank line	
Th <u>e</u> n by:	(none) V O Ascending O Escending	
Header	□ Footer:	
Then by:	(none) V O Ascending Oescending	
Header	□ Footer: □ Blank line	
Grand total	s: Title, count, and totals	
	Custom grand total title:	
	Grand total	
🔽 Itemi <u>z</u> e eve	ery instance	



5. Click the Formatting tab. For Fields, click Family and for Field formatting, tick Hidden field.

Schedule Properties		×
Fields: Family Type HookCountSafehookLind TotaRailLengthLinc NumberOf3mRailLengthSLinc NumberOf15mRailLengthSLinc	Appearance <u>H</u> eading: Family Heading orientation:	
NumberOfEndCapsLinc NumberOfJoinersLinc Count	Horizontal Alignment: Left	×
	Field formatting:	Field Format Conditional Format

6. From the Fields list, for each field, it is recommended to rename the Heading as shown in the example below. Doing so will create clear and easy to read column names for the schedule output.

Schedu	le Prope	erties		×
Fields	Filter	Sorting/Grouping	Formatting	Appearance
	У	fehookLinc thLinc		ading: pok Type
Num Num	oerOf15n oerOfEnc oerOfJoir	RailLengthsLinc nRailLengthsLinc ICapsLinc nersLinc	Ho	ading orientation: rizontal \checkmark nment: ft \checkmark

Recommendations for column heading names:

Field Name	Renamed To
Туре	Hook Type
HookCountSafehookLinc	No. of Hooks
TotalRailLengthLinc	Total Rail Length
NumberOf3mRailLengthsLinc	No. of 3m Rail Lengths
NumberOf15mRailLengthsLinc	No. of 1.5m Rail Lengths
NumberOfEndCapsLinc	No. of End Caps
NumberOfJoinersLinc	No. of Joiners
Count	Count



 For the following Fields: NumberOf3mRailLengthsLinc, NumberOf15mRailLengthsLinc, NumberOfEndCapsLinc and NumberOfJoinersLinc, click Calculate totals as shown in the example below.

elds Filter	Sorting/Grouping	Formatting	Appearance			
Fields:						
Family Type		Hea	ading:			
HookCountS	afehookLinc	N	o. of 3m Rail Lengths			
NumberOf3n	güleine nRailLengthsLinc					
NumberOf15mRailLengthsLinc NumberOfEndCapsLinc			Heading orientation:			
NumberOfJo		HO	rizontal	~		
Count		Alig	inment:			
		Le	ft	~		
		Fiel	d formatting:	Field Format		
			H <u>i</u> dden field	Conditional Format		
			Show conditional form	at on sheets		

8. Click OK to see the schedule results.

<linc furniture="" schedule=""></linc>								
Α	В	C	D	E	F	G	Н	
Hook Type	No. of Hooks	Total Rail Length	No. of 3m Rail Lengths	No. of 1.5m Rail Lengths	No. of End Caps	No. of Joiners	Count	
Euro V2 Bag Hook	5	1500	0	1	2	0	1	
		·			,			
lhook Mk2 Bag Hook	12	3496	2	0	2	1	1	
OZlhook Bag Hook	24	7242	2	1	2	2	1	
Grand total: 3	·		4	2	6	3		