



Lindab MagiCAD Plugin for Revit for DIMsilencer and LindQST

User guide

13/05/2019

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About this document

Lindab supports now its Comfort Selection Tools integrated in MagiCAD for Revit. The benefits are that you can now use Lindabs advanced calculation and presentation methods and transfer the result into MagiCAD for Revit.

Installation of Revit Add-in

Requirements

To be able to use the connection between the Lindab Software and MagiCAD for Revit you need to have:

Revit

- Revit 2017, 2018, 2019 and/or 2020

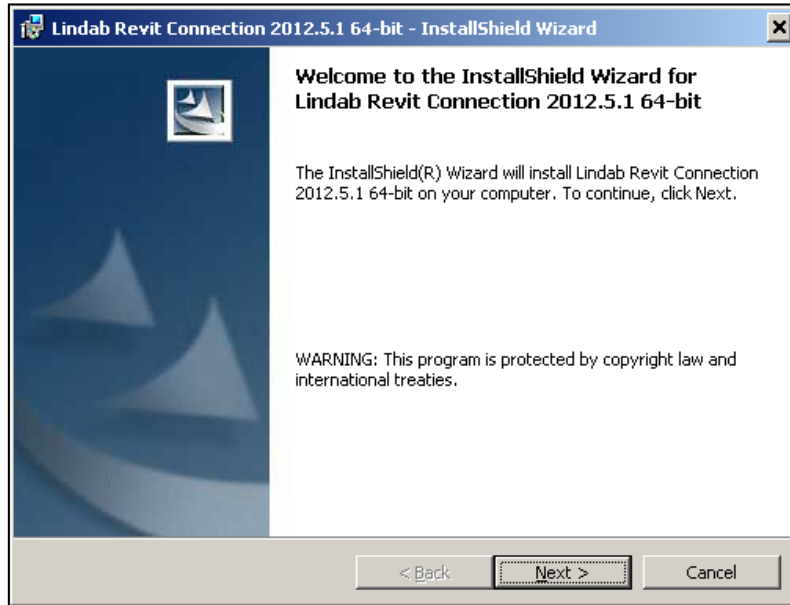
MagiCAD (optional)

- MagiCAD for Revit 2019 (with Revit 2017, 2018, 2019)
- MagiCAD for Revit 2020 (with Revit 2018, 2019, 2020)

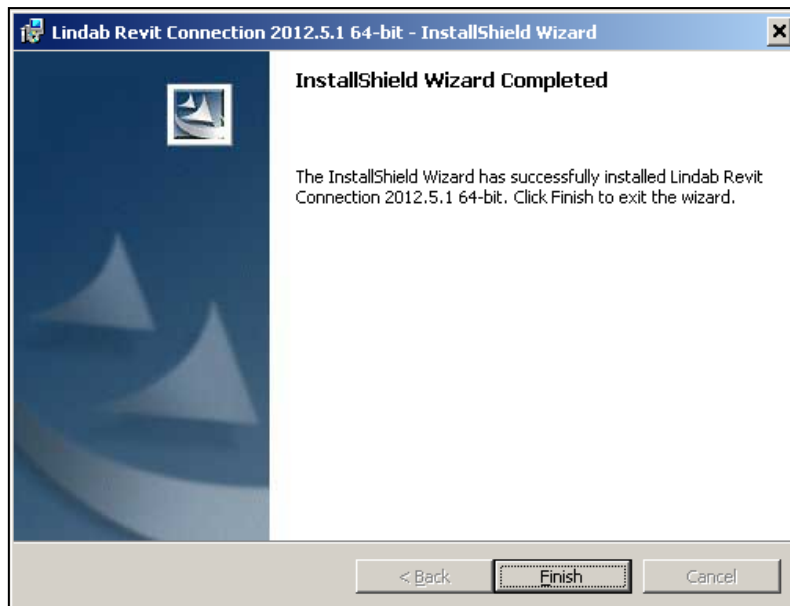
The 64-bit installer can be downloaded from:

<https://portal.magicad.com/download/ProductSearch?searchStr=Lindab&categoryId=3>

NOTE: You need to have local administrator rights to install the Plug-in on your computer.



The installation Wizard will guide you through the installation; we recommend selecting the suggested installation paths.



Starting the program

Now you can install the Lindab software. Please note that you must have the version numbers below or newer to use the Plug-in.

DIMsilencer: <http://itsolution.lindab.com/downloads/dimsilencer/5.1/install.exe>



Using the connections:



Start a project on Revit and select the "Add-Ins" tab.

Connection to DIMsilencer



Connection to LindQST (Webbased Comfort Selection Tool)



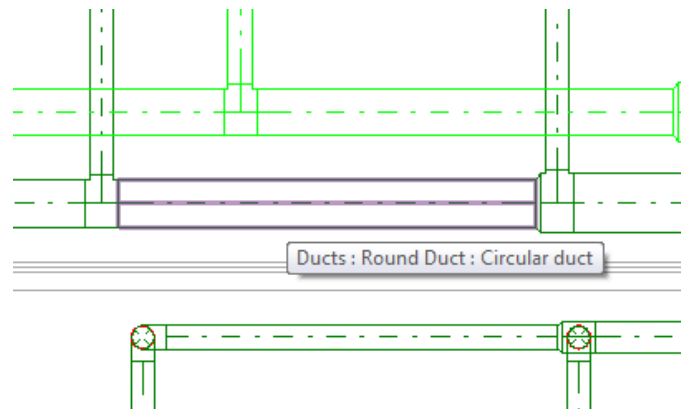
Connection to LindQST for silencers (Webbased Comfort Selection Tool)



DIMSilencer

In DIMsilencer you can select Lindab silencers. DIMsilencer is an advanced software to state requirements, calculate results and compare Lindab silencers with each other are of great benefit to detect and solve sound problems in your duct design. Especially the possibility to use parametrical, will say non-standard sizes, for rectangular silencers and transfer them to MagiCAD are unique.

Push the DIMsilencer button and select the circular or rectangular duct for which you want to calculate and insert a silencer.



DIMSilencer will now open and you can enter the sound values before the silencer and the designated result after the silencer.

If you ran flow summation in MagiCAD before, the airflow will be transferred as well to calculate the sound generation; otherwise you can enter these values also manually.

MagiCAD Väj komponent

Markera ljuddämparens placering

Omgivning: Uteluft, Avluft, Före, Efter, Rum, Tilluft, Frånluft

Krav för ljuddämpare

Beskrivning av Lw före

	Lw före ljuddämpare	Dämpning	Max Ljudalstring	Lw efter ljuddämpare
63 Hz (dB)	45	11		34
125 Hz (dB)	50	13		37
250 Hz (dB)	48	15		33
500 Hz (dB)	47	30		17
1000 Hz (dB)	40	46		-6
2000 Hz (dB)	35	36		-1
4000 Hz (dB)	28	14		14
8000 Hz (dB)	14	12		2
vägt dB(A)	47		0	27

Luftflöde: 0 l/s
Tryckfall: 0 Pa Kanalhastighet: 0.0 m/s

Ljuddämpare

Kanaltyp: Cirkulär Rektangulär

Typ av ljuddämpare: Rak Böjd

Ljuddämpare: LRCA

Ansl. dim: 200 mm

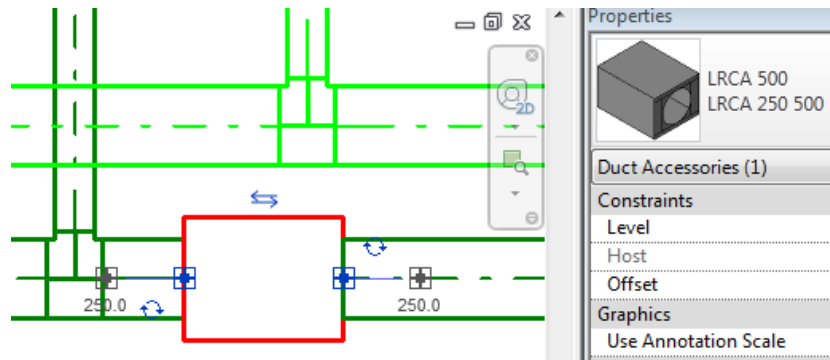
Längd: 500

Vald produkt: LRCA 200 1000

OK Avbryt

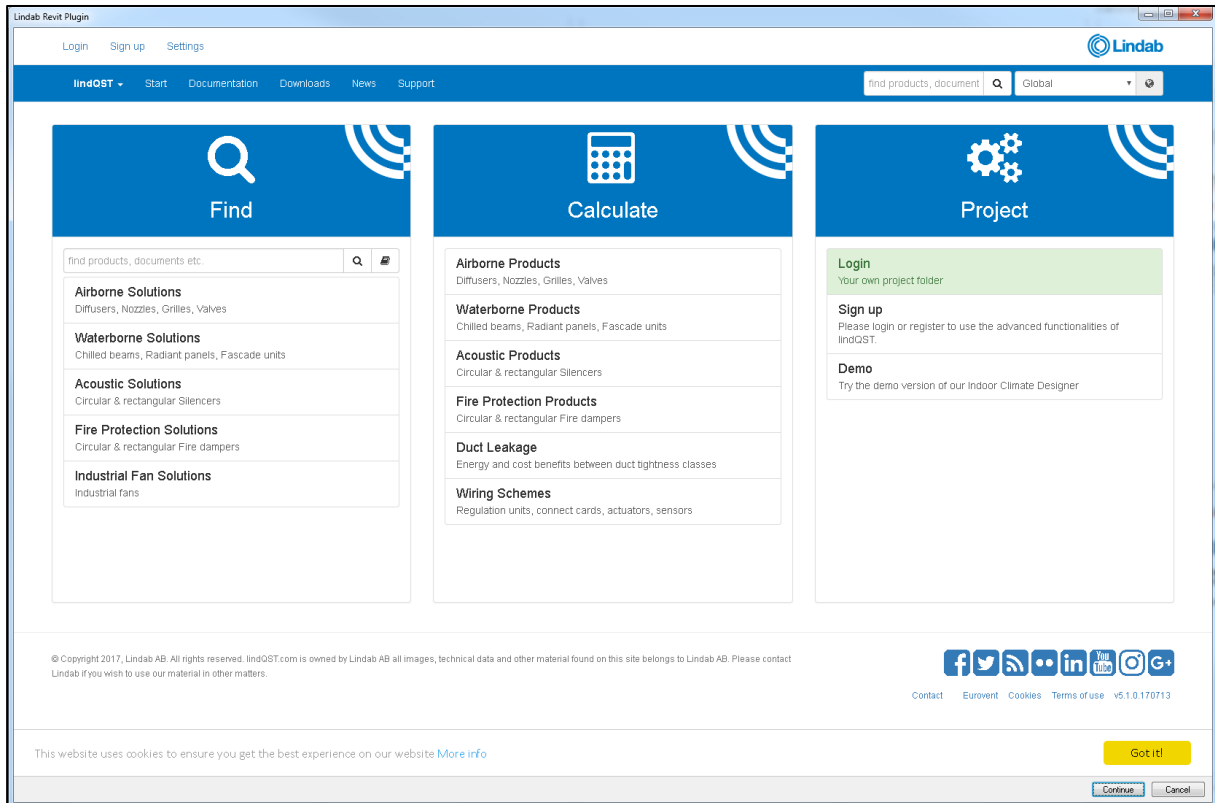
When you selected a silencer you press the "OK"-button. DIMsilencer will then close and MagiCAD dialog asks you to state a User Code.

In the last step you click on the duct you want to insert your silencer into. You can even select larger or smaller ducts than the size of the selected silencer. MagiCAD will in this case insert reductions automatically.



LindQST

LindQST is a webbased selection tool for Lindabs Comfort product range including documentation.

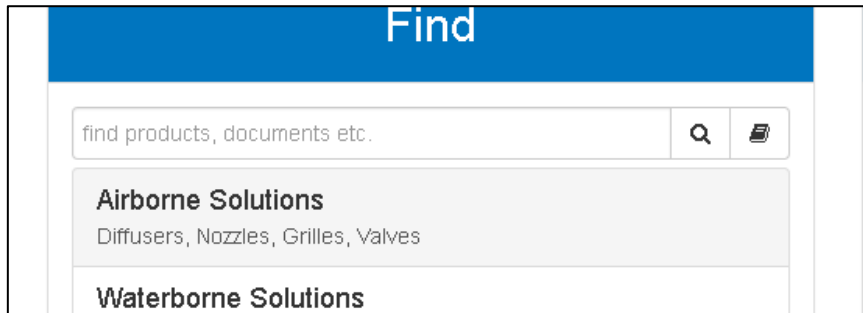


Push the LindQST button in MagiCAD to open a web browser and start LindQST.

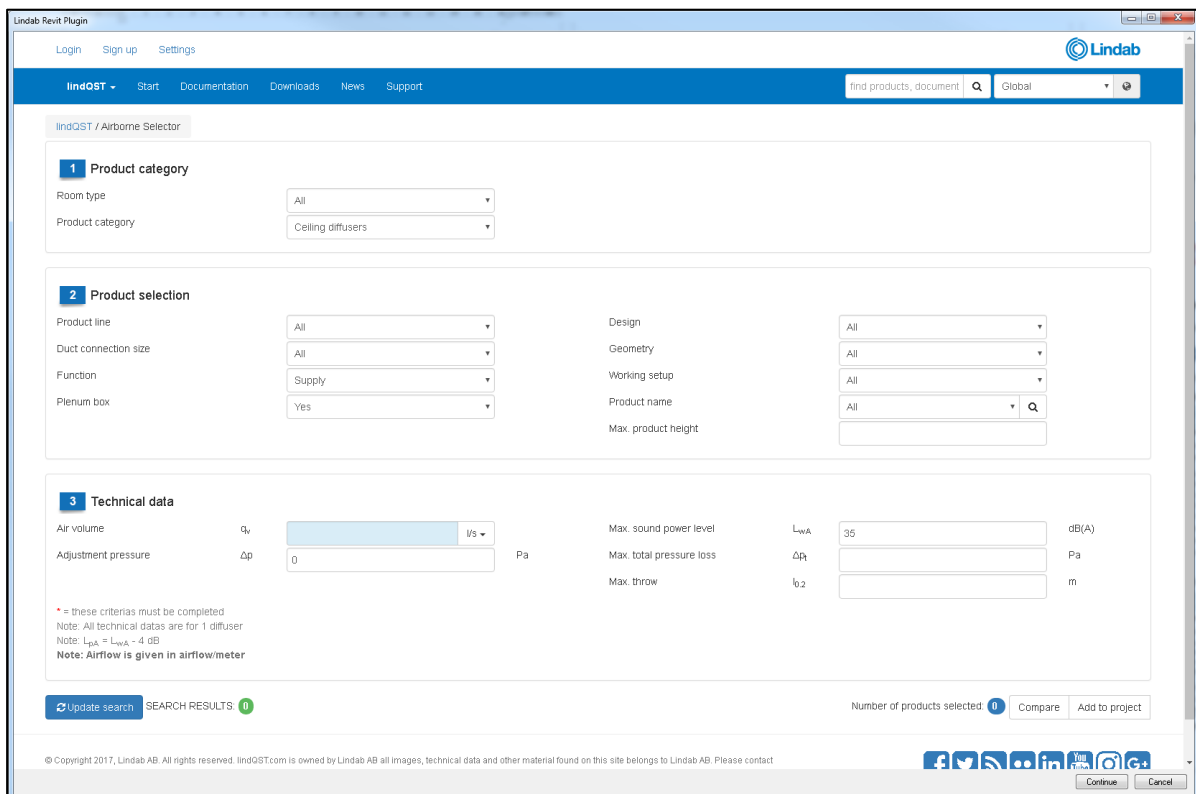
NOTE: You must start LindQST with the button in Revit to be able to use the transfer function into MagiCAD for Revit.

Example for a diffuser selection

1. Select a Airborne Solutions or find suitable products with search



2. Select a product or define the search parameters for the diffuser you want to select. Enter the technical requirements, but at least airflow and sound.



1 Product category

Room type: All

Product category: Ceiling diffusers

2 Product selection

Product line: All

Duct connection size: All

Function: Supply

Plenum box: Yes

Design: All

Geometry: All

Working setup: All

Product name: All

Max. product height: []

3 Technical data

Air volume: q_v [] l/s

Adjustment pressure: Δp [] Pa

Max. sound power level: L_{wA} [35] dB(A)

Max. total pressure loss: Δp_1 [] Pa

Max. throw: $l_{0.2}$ [] m

* = these criterias must be completed
 Note: All technical dates are for 1 diffuser
 Note: $L_{wA} = L_{wA} + 4$ dB
 Note: Airflow is given in airflow/meter

[Update search] SEARCH RESULTS: [0]

Number of products selected: [0] [Compare] [Add to project]

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[Continue] [Cancel]

NOTE: the more parameter you define the quicker and more selective the calculations will work.

- LindQST calculates all diffusers which fulfill the requirements. Push on "Update Search" to get a list of calculated diffusers. In the selection you can even compare 2 or more products to each other for detailed information.

Lindab Revit Plugin

Note: All technical datas are for 1 diffuser
 Note: $L_{wA} \neq L_{wA} - 4$ dB
 Note: Airflow is given in airflowmeter

Update search SEARCH RESULTS 24 Number of products selected 1 Compare Add to project

<input type="checkbox"/>	Order code	Working setup	L_{d2} [m]	L_{wA} [dB(A)]	ΔP_1 [Pa]
<input type="checkbox"/>	CRL-100+MBB-100-100-S	4-way	1.7	35	44
<input type="checkbox"/>	CRL-100+MBB-100-100-S	Vertical	5.3	35	44
<input type="checkbox"/>	CRL-100+MBB-100-100-S	Vertical	4.3	35	44
<input checked="" type="checkbox"/>	CRL-100+MBB-100-100-S	Vertical	3.9	35	44
<input type="checkbox"/>	CRL-100+MBC-100-100	4-way	1.7	24	38
<input type="checkbox"/>	CRL-100+MBC-100-100	Vertical	5.3	24	38
<input type="checkbox"/>	CRL-100+MBC-100-100	Vertical	4.3	24	38
<input checked="" type="checkbox"/>	CRL-100+MBC-100-100	Vertical	3.9	24	38
<input type="checkbox"/>	CRL-125+MBB-100-125-S	4-way	1.4	28	31
<input type="checkbox"/>	CRL-125+MBB-100-125-S	Vertical	3.9	28	31
<input type="checkbox"/>	CRL-125+MBB-100-125-S	Vertical	3.5	28	31
<input checked="" type="checkbox"/>	CRL-125+MBB-100-125-S	Vertical	3	28	31
<input type="checkbox"/>	CRL-125+MBC-125-125-S	4-way	1.4	<20	12
<input type="checkbox"/>	CRL-125+MBC-125-125-S	Vertical	3.9	<20	12
<input type="checkbox"/>	CRL-125+MBC-125-125-S	Vertical	3.5	<20	12
<input type="checkbox"/>	CRL-125+MBC-125-125-S	Vertical	3	<20	12
<input type="checkbox"/>	CRL-125+MBC-100-125	4-way	1.4	<20	18
<input type="checkbox"/>	CRL-125+MBC-100-125	Vertical	3.9	<20	18

Continue Cancel

- Select a diffuser to get a detailed report including the "Export to Revit" button.

Lindab Revit Plugin

Login Sign up Settings

lindQST Start Documentation Downloads News Support

Find products, document Global

lindQST / Airborne Calculator

Product category Ceiling diffusers

Product name CRL Q Reset

Duct connection size 100

Function Supply

Plenum box Yes

Working setup Vertical

Article name CRL-125+MBB-100-125-S

Air volume Q_v 25 m^3/s

Room attenuation D_r 0 dB

Adjustment pressure ΔP 0 Pa

Description

Calculate

* = these criterias must be completed
 Note: All technical datas are for 1 diffuser
 Note: Results for grilles with damper option are for open damper. Please use the correction factors in the catalogue page for other settings.

CRL-125+MBB-100-125-S

Generate PDF Generate DXF Visualize Add to project Export to Revit

Product information Results

Face velocity v 2.6 m/s

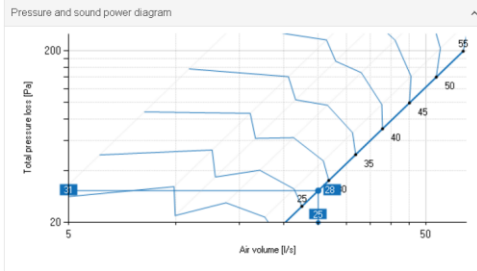
Total pressure loss ΔP_1 31 Pa

Sound power level L_{wA} 28 dB(A)

Sound pressure level L_{pA} 28 dB(A)

Throw L_{d2} 3.9 m

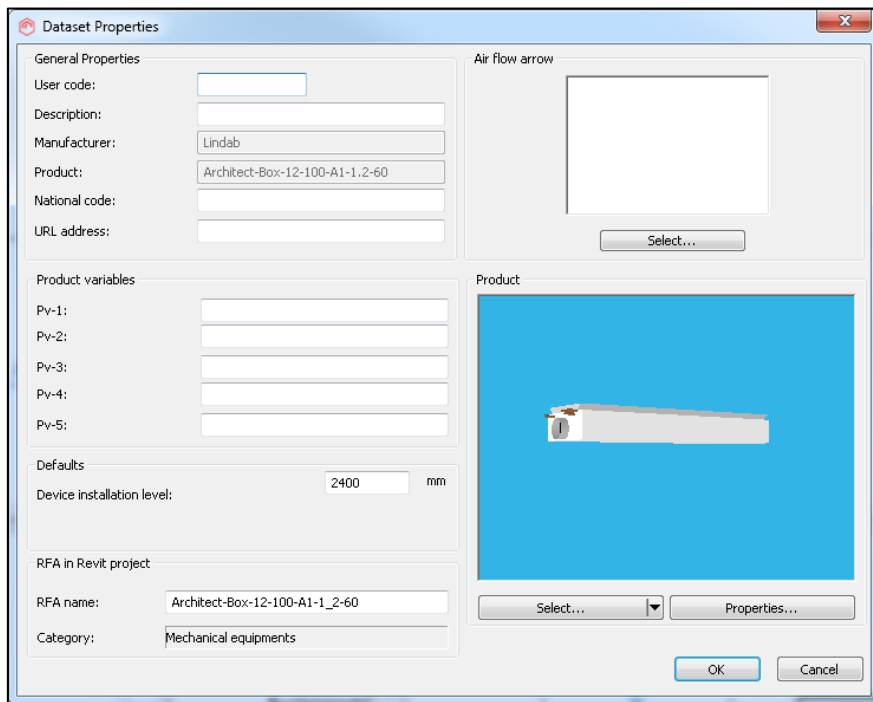
Pressure and sound power diagram



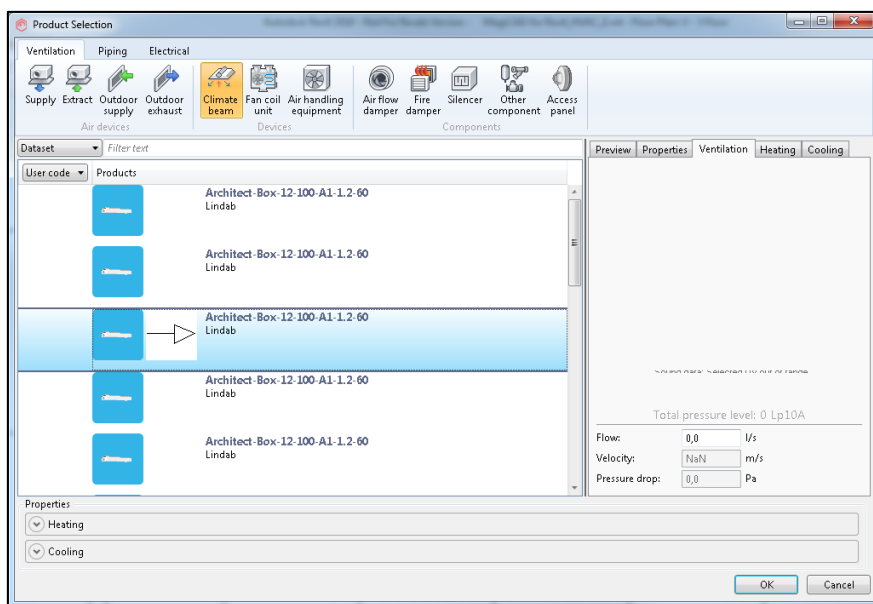
Hz	63	125	250	500	1K	2K	4K	8K
K_{ak}	13	9	3	-5	-7	-11	-15	-19
ΔL	21	16	6	18	19	18	19	21

Continue Cancel

5. Push "Continue" button to close the dialog.
6. Insert the product into the Revit project
 - a. With MagiCAD
 If plugin is used together with MagiCAD plugin adds the selected product to the MagiCAD dataset at first.



Then product installation continue by showing Product Selection dialog

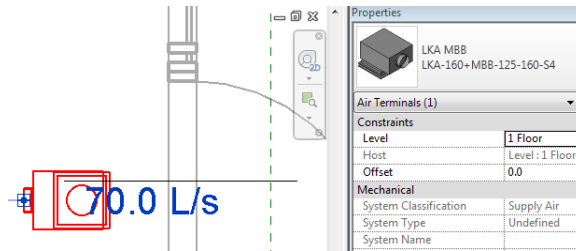


Then installation point of product is requested to shown at the plan.

b. Plain Revit (without MagiCAD)

If plugin is used without MagiCAD plugin adds the selected product's family to the list of Revit families at first. No dialog will be shown.

Then installation point of product is requested to shown at the plan.

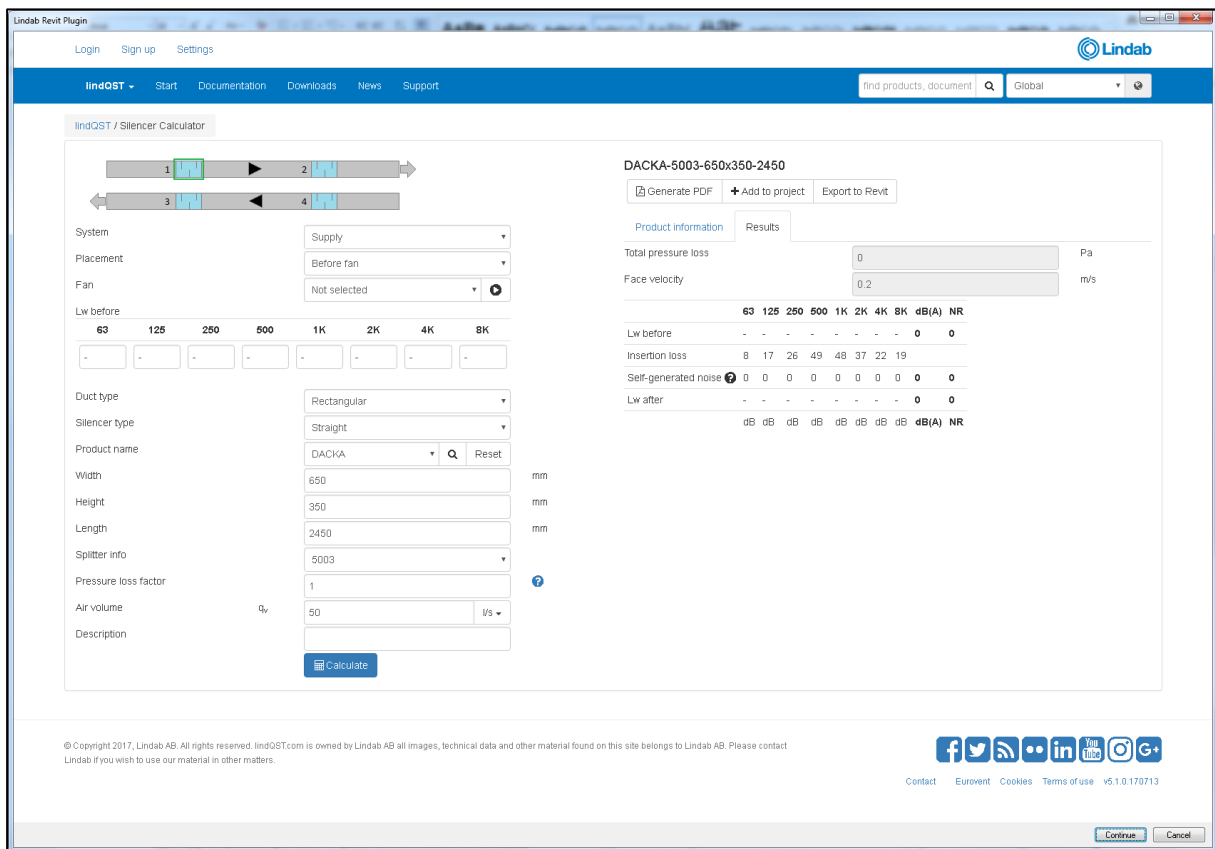


LindQST for silencers

LindQST is a web based selection tool for Lindabs Comfort product range including documentation.

Push the “LindQST for silencers” button in Revit to open a web browser and point out duct where silencer will be installed. If user selects some duct, dimensions and sound data values are transferred to LindQST. User can continue also without pointing out the duct but then the values are not transferred to LindQST.

Plugin directs user to Silencer Calculator in Lindqst:



The screenshot displays the LindQST Silencer Calculator interface. The top navigation bar includes 'LindQST', 'Start', 'Documentation', 'Downloads', 'News', and 'Support'. The main content area is divided into two columns. The left column contains input fields for 'System' (Supply), 'Placement' (Before fan), 'Fan' (Not selected), 'Lw before' (63, 125, 250, 500, 1K, 2K, 4K, 8K), 'Duct type' (Rectangular), 'Silencer type' (Straight), 'Product name' (DACKA), 'Width' (650 mm), 'Height' (350 mm), 'Length' (2450 mm), 'Splitter info' (5003), 'Pressure loss factor' (1), 'Air volume' (50 l/s), and 'Description'. A 'Calculate' button is located at the bottom of this column. The right column displays the results for the selected product, DACKA-5003-650x350-2450. It shows 'Total pressure loss' as 0 Pa and 'Face velocity' as 0.2 m/s. Below this is a table of noise data:

	63	125	250	500	1K	2K	4K	8K	dB(A)	NR
Lw before	-	-	-	-	-	-	-	-	0	0
insertion loss	8	17	26	49	48	37	22	19		
Self-generated noise	0	0	0	0	0	0	0	0	0	0
Lw after	-	-	-	-	-	-	-	-	0	0
	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	NR

At the bottom of the interface, there is a copyright notice: '© Copyright 2017, Lindab AB. All rights reserved. LindQST.com is owned by Lindab AB all images, technical data and other material found on this site belongs to Lindab AB. Please contact Lindab if you wish to use our material in other matters.' Social media icons for Facebook, Twitter, RSS, LinkedIn, YouTube, Instagram, and Google+ are also present, along with a footer containing 'Contact', 'Eurovent', 'Cookies', 'Terms of use', and 'v5.1.0.170713'.

NOTE: You must start LindQST Calculator with the button in Revit to be able to use the transfer function into MagiCAD for Revit.

When silencer is selected press “Export to Revit” button and then Continue button in the plugin window.

If plugin is used together with MagiCAD plugins adds the selected product to the MagiCAD dataset at first and the second thing is Product Selection dialog will be shown.

After these steps silencer can be installed to Revit drawing once the conversion is done.