



# **Lindab MagiCAD plugin for AutoCAD**

User guide

18/05/2020

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## About this document

This document is user guide for using Lindab MagiCAD plugin for AutoCAD. With plugin users is able to transfer devices from LindQST to MagiCAD for Revit application. The benefits are that you can use Lindabs advanced calculation and presentation methods in LindQST application.

The plugin supports also silencer transferring between DIMsilencer and MagiCAD for AutoCAD applications.

## Installation

### Requirements

To be able to use the plugin between the Lindab LindQST Software and MagiCAD for AutoCAD you need to have:

#### AutoCAD

- AutoCAD 2015 - 2021

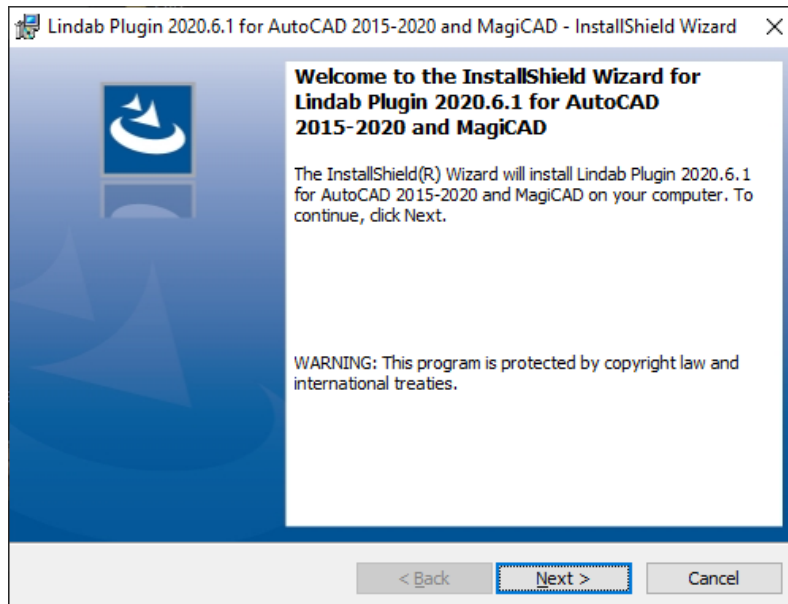
#### MagiCAD (optional)

- MagiCAD for AutoCAD 2020 (with AutoCAD 2015 - 2020)
- MagiCAD for AutoCAD 2021 (with AutoCAD 2017 - 2021)

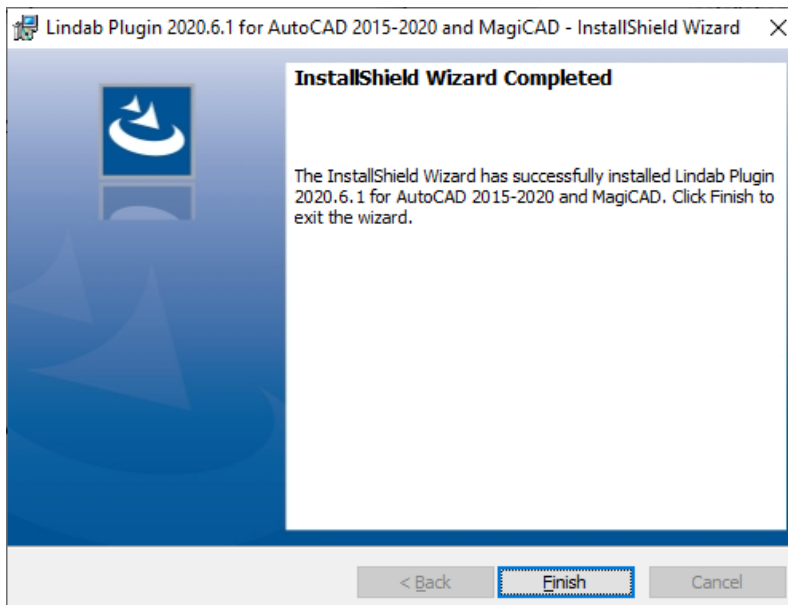
The 64-bit installer can be downloaded from:

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

**NOTE: You need to have local administrator rights to install the plugin on your computer.**



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



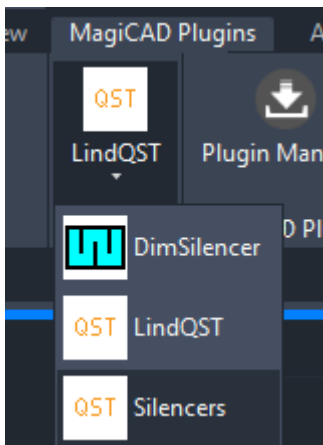
### Starting the program

Now you can install the Lindab DIMsilencer software.

DIMsilencer: <http://www.lindab.com/global/pro/downloads/software/ventilation/pages/dimsilencer.aspx>



Using the features of the plugin:



Start a project on AutoCAD and select the “MagiCAD Plugins” tab.

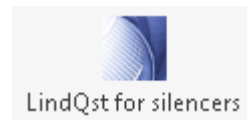
Connection to DIMsilencer



Connection to LindQST (Webbased Comfort Selection Tool)



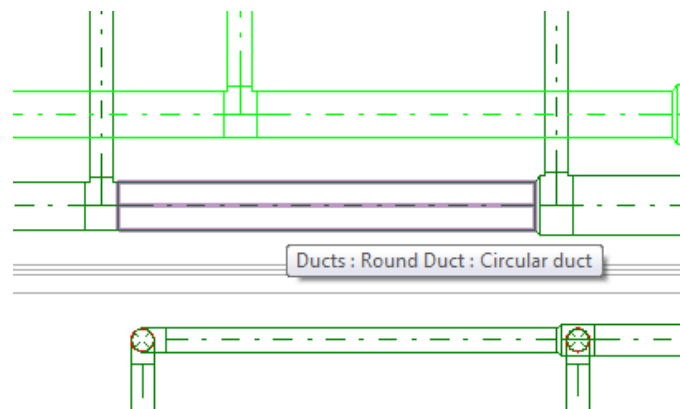
Connection to LindQST for silencers (Webbased Comfort Selection Tool)



## 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

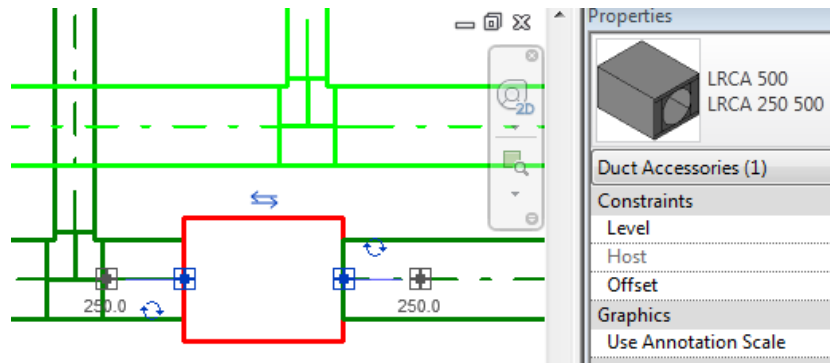
Ljuddämpare: LRCA  
Ansl. dim: 200 mm  
Längd: 500

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.

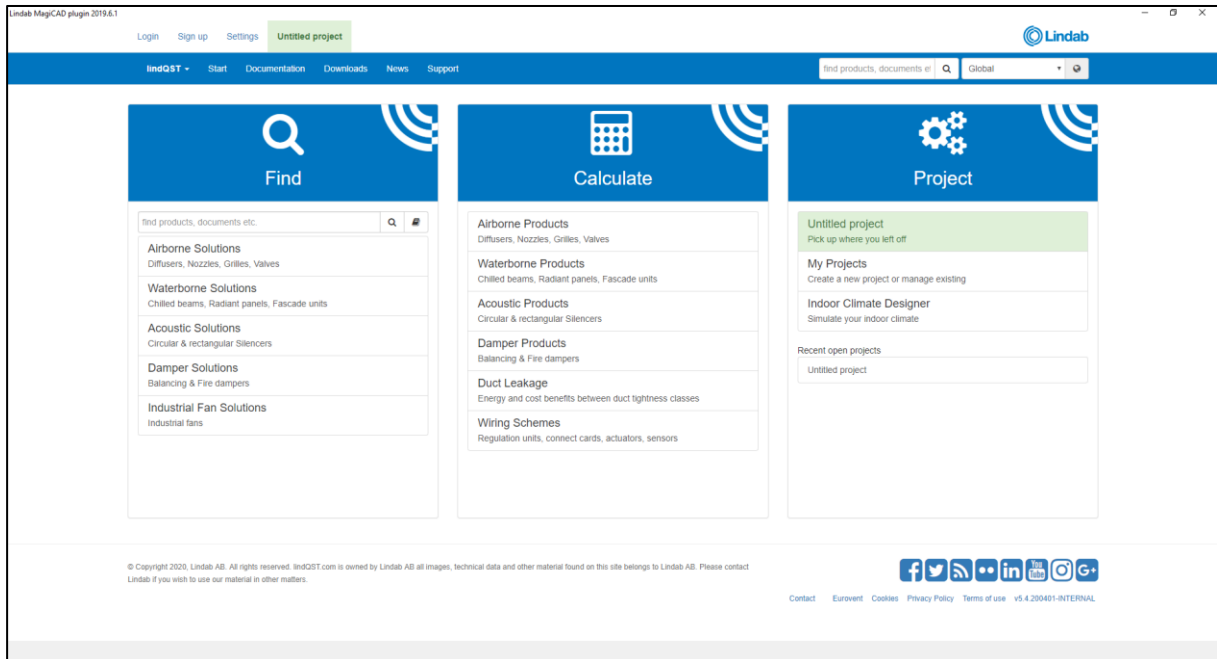
In the last step you click on the duct you want to insert your silencer into. You can even select larger or smaller ducts than the size of the selected silencer. MagiCAD will in this case insert reductions automatically.





## LindQST

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

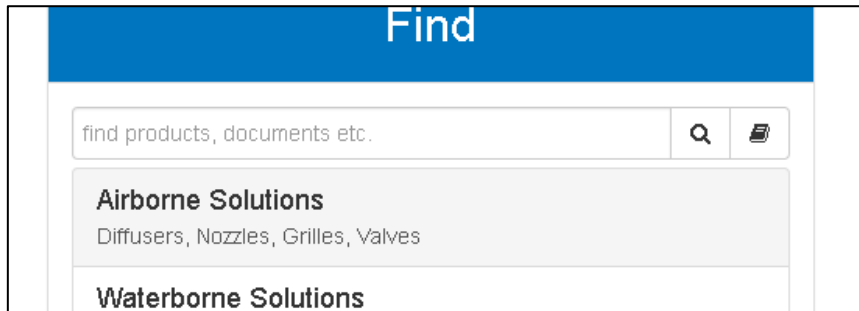


Push the LindQST button in MagiCAD to open a plugin browser and start LindQST.

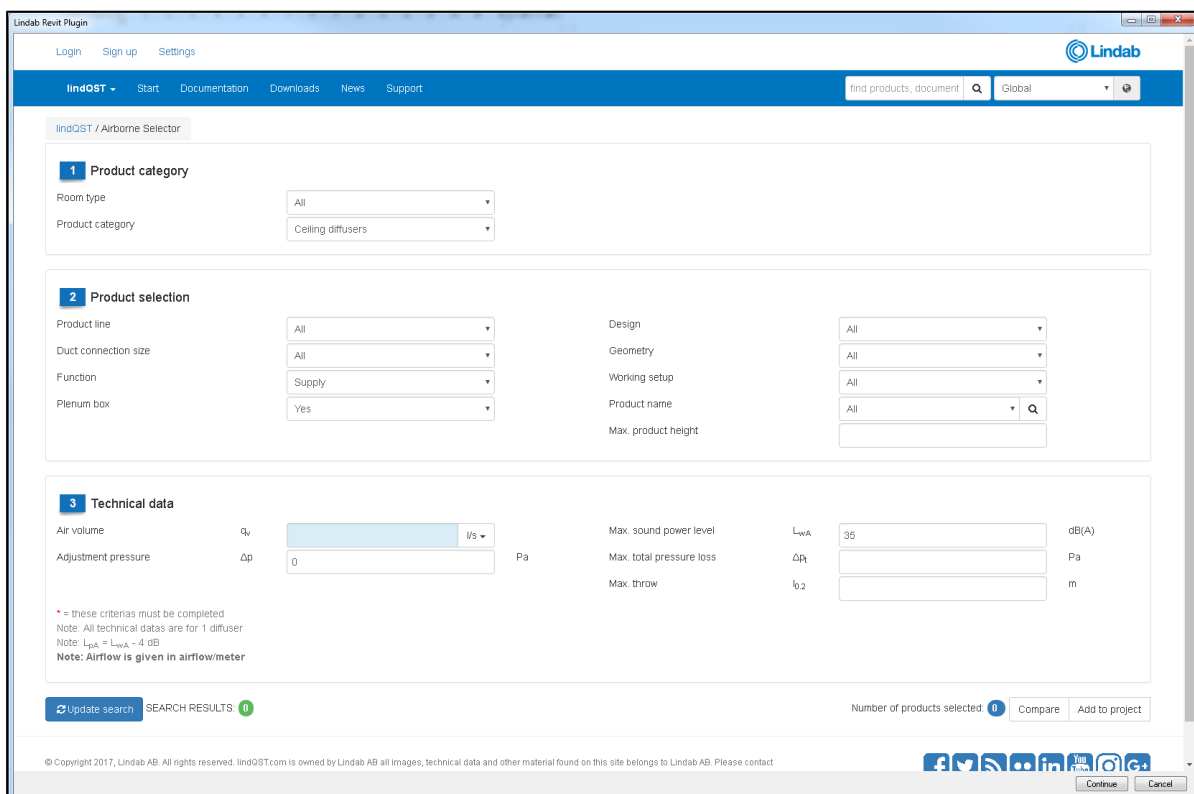
**NOTE: You must start LindQST with the button in AutoCAD to be able to use the transfer function into MagiCAD for AutoCAD.**

## 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.



**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:  $L_{wA} \neq L_{wR} - 4$  dB  
Note: Airflow is given in airflowmeter

Update search SEARCH RESULTS 24 Number of products selected 3 Compare Add to project

	Order code	Working setup	$L_{eq}$ [m]	$L_{wA}$ [dB(A)]	$\Delta p_1$ [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+MBB-125-125-S	4-way	1.4	<20	12
<input type="checkbox"/>	CRL-125+MBB-125-125-S	Vertical	3.9	<20	12
<input type="checkbox"/>	CRL-125+MBB-125-125-S	Vertical	3.5	<20	12
<input type="checkbox"/>	CRL-125+MBB-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 MagiCAD" button.

Lindab Revit Plugin

Product category: Ceiling diffusers

Product name: CRL

Duct connection size: 100

Function: Supply

Plenum box: Yes

Working setup: Vertical

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

Air volume: 25 m<sup>3</sup>/s

Room attenuation: 0 dB

Adjustment pressure: 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 DWF Visualize Add to project Export to MagiCAD

Product information Results

Face velocity: 2.6 m/s

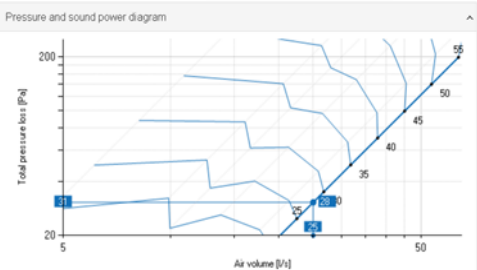
Total pressure loss:  $\Delta p_1$  31 Pa

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

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

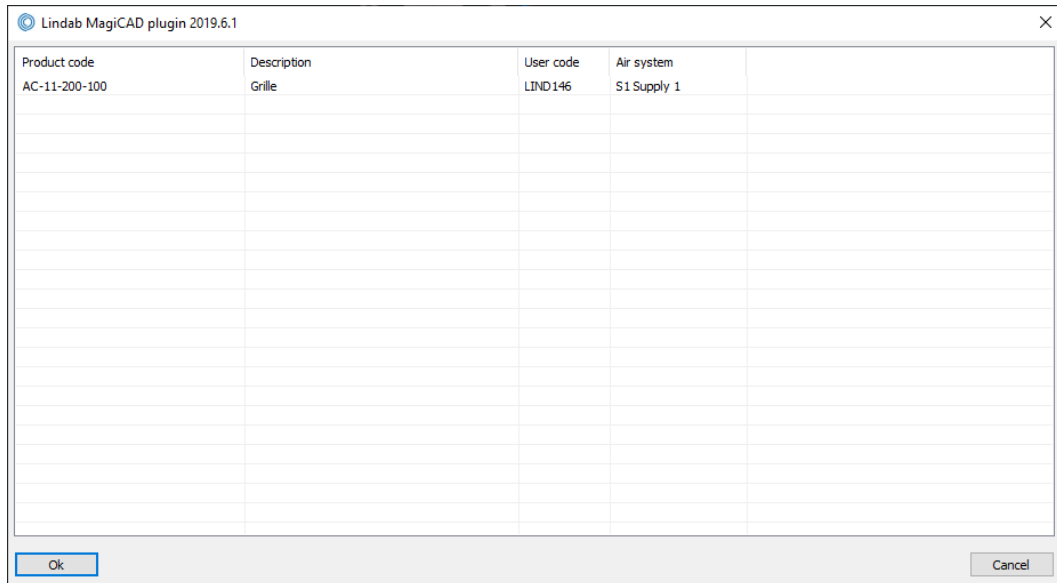
Throw:  $L_{0,2}$  3.9 m

Pressure and sound power diagram



Hz	63	125	250	500	1K	2K	4K	8K
$K_{0A}$	13	9	3	-5	-7	-11	-15	-19
$\Delta L$	21	16	6	18	19	18	19	21

5. Insert the product into the AutoCAD project (with MagiCAD)  
If plugin is used together with MagiCAD plugin adds the selected product to the MagiCAD project at first. Therefore user code and air system is asked from designer in the following dialog:



Product code	Description	User code	Air system
AC-11-200-100	Grille	LIND146	S1 Supply 1

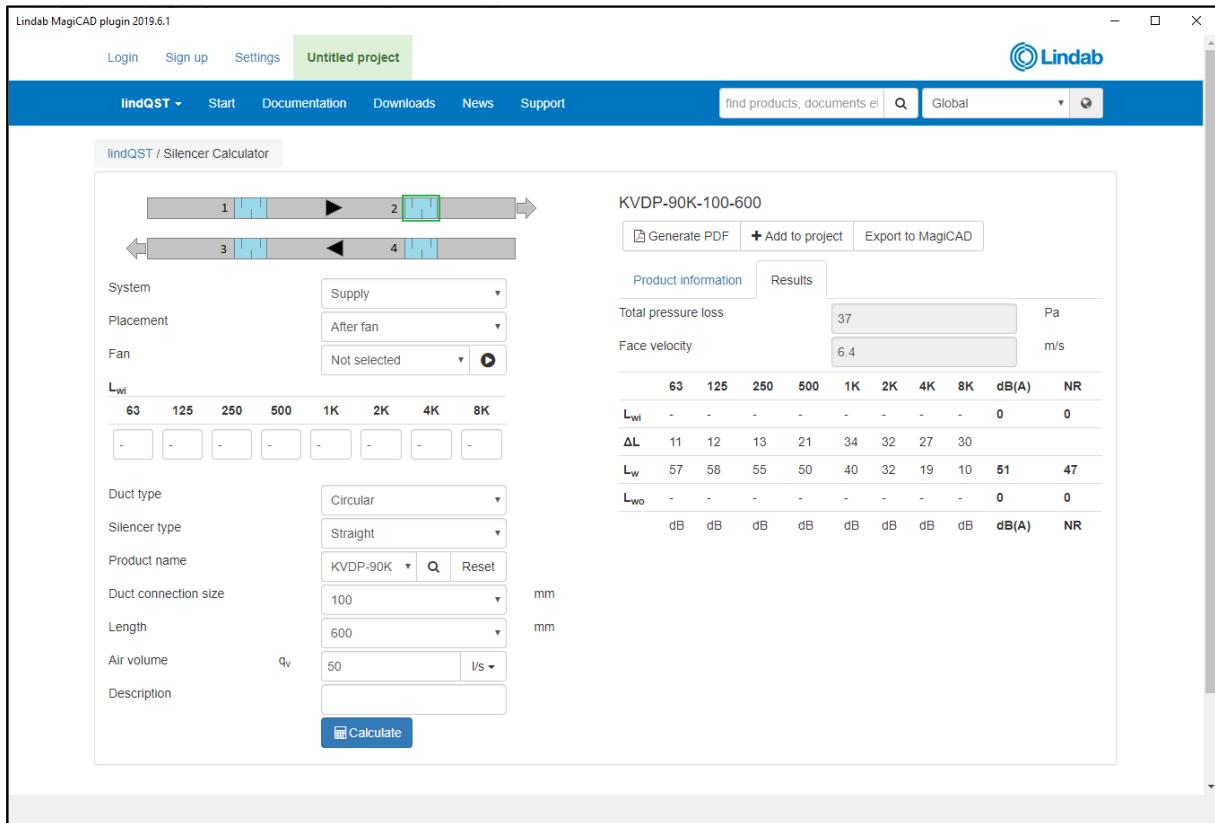
Then installation point of product is requested to shown at the plan.

### LindQST for silencers

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

Push the “LindQST for silencers” button in AutoCAD to open a web browser and point out duct where silencer will be installed to. 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:



**lindQST / Silencer Calculator**

System: Supply  
 Placement: After fan  
 Fan: Not selected

$L_{wi}$

	63	125	250	500	1K	2K	4K	8K
	-	-	-	-	-	-	-	-

Duct type: Circular  
 Silencer type: Straight  
 Product name: KVDP-90K  
 Duct connection size: 100 mm  
 Length: 600 mm  
 Air volume  $q_v$ : 50 l/s

**Calculate**

**KVDP-90K-100-600**

Generate PDF | Add to project | Export to MagiCAD

Product information | Results

Total pressure loss: 37 Pa  
 Face velocity: 6.4 m/s

	63	125	250	500	1K	2K	4K	8K	dB(A)	NR
$L_{wi}$	-	-	-	-	-	-	-	-	0	0
$\Delta L$	11	12	13	21	34	32	27	30		
$L_w$	57	58	55	50	40	32	19	10	51	47
$L_{wo}$	-	-	-	-	-	-	-	-	0	0
	dB	dB	dB	dB	dB	dB	dB	dB	dB(A)	NR

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

When silencer is selected press “Export to MagiCAD” button.

User code is asked in the following dialog for each silencers:

