



Lindab MagiCAD plugin for DIMcomfort, DIMsilencer och LindQST

Lindab supports its ICS Selection Tools integrated in MagiCAD. The benefit is the possibility to use Lindabs advanced calculation and presentation methods and transfer the result into MagiCAD.

NOTE:

The functionality of the Lindab MagiCAD plugin is integrated in the CADvent plugin an additional installation is not necessary!

Installation of MagiCAD plugin

Installation of Lindab MagiCAD plugin

Installation requirements

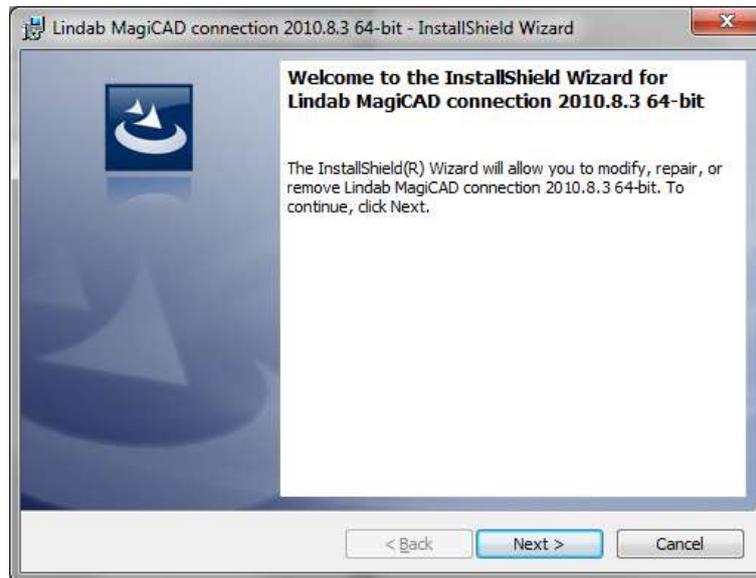
The installation requires MagiCAD 2013.11 and AutoCAD 2010-2014 or MagiCAD 2014.4 and AutoCAD 2010-2015

The Plug-in can be downloaded from:

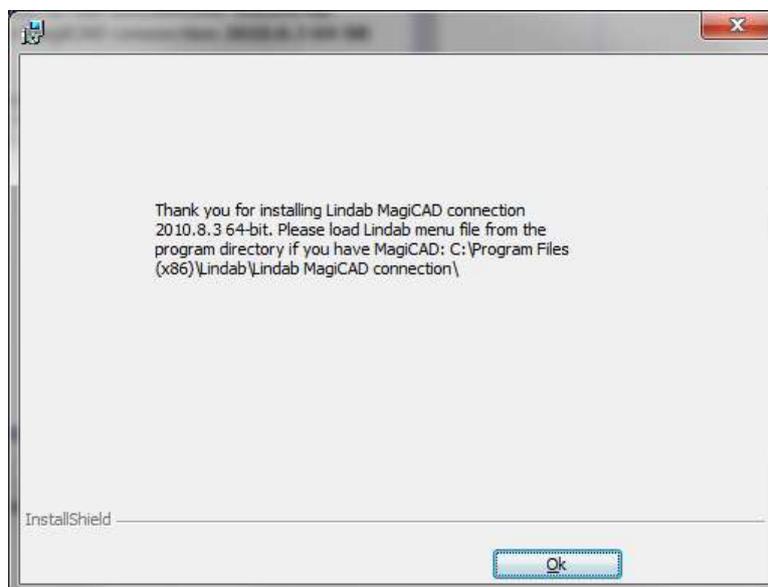
<https://portal.magicad.com/download/ProductSearch?searchStr=Lindab&categoryId=3>

The plugin contains installation files for both, 32- and 64-bit MagiCAD versions.

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



After the installation is completed you will see the screen below prompting you to load the menus manually for the first time from the link shown in the dialog. The menus can be loaded using the AutoCAD MENULOAD function or through the CUI interface.



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

DIMcomfort:

<http://itsolution.lindab.com/downloads/dimcomfort/latest/install.exe>



DIMsilencer:

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





Using the connections



When you have loaded the menu file you will have 3 additional buttons available:



Connection to DIMcomfort



Connection to DIMsilencer



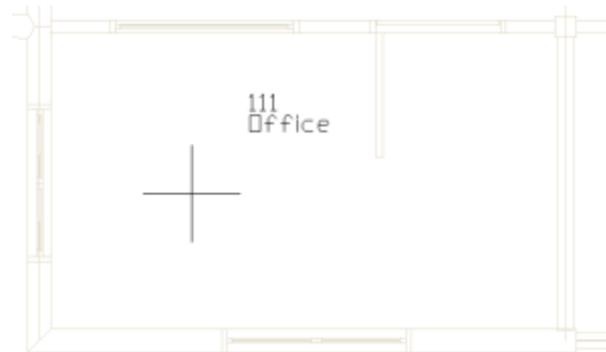
Connection to LindQST (New webbased Comfort Selection Tool)

DIMcomfort

The DIMcomfort connection contains 2 methods:

- Importing rooms to DIMcomfort using MagiCAD Room module
- Import freely using AutoCAD POLYLINE command

If you have MagiCAD Room module installed you click first on the DIMcomfort button and then in the MagiCAD Room you want to transfer. In this case the room geometry as well as airflows for supply and extract air are transferred.



Select a MagiCAD room or [select room borders Manually]:

If you use the MagiCAD Room transfer, the airflows for supply and extract will be read only in DIMcomfort.

Otherwise you can always draft a Polyline to transfer the room boundaries into DIMcomfort. Press “m” to select room boundaries manually, close the Polyline and press Enter, then you will be asked to enter a room height. Press Enter again if you have stated the room height or use the default height.

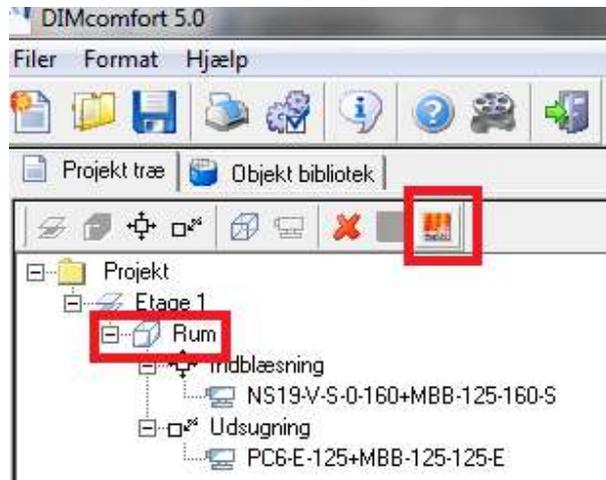


NOTE: DIMcomfort allows only square angles, other angles can be calculated, but you can get a warning that the representation can be wrong.



After your selection DIMcomfort will open. You can now use DIMcomfort as usual, select and insert diffusers, place them in your room and visualize throw pattern, air velocity and sound in the comfort zone.

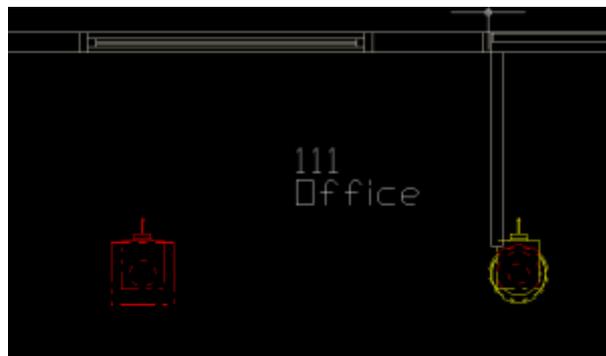
When you are finished you click on the room node in the tree view and then select the export button to MagiCAD.



DIMcomfort will then exit and a dialog in MagiCAD will pop up prompting you to state a User Code and select a system.



Now the diffusers will be shown in the same position, height and rotation as selected in DIMcomfort.

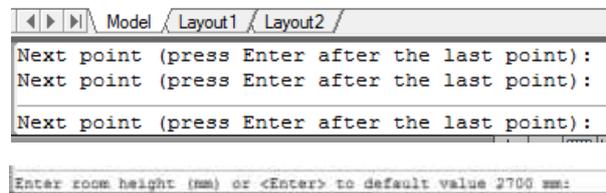
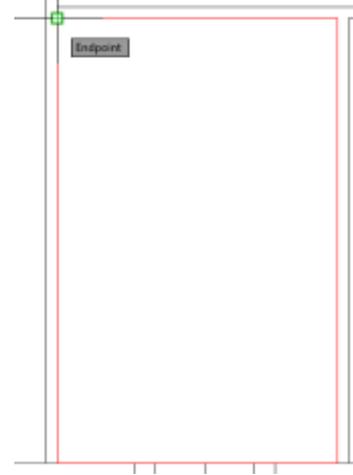


If you don't have the MagiCAD Room module you must draw the rooms boundaries manually using the AutoCAD Polyline function.



Press "Enter" or "Return" to exit the Polyline function and state the height of the room.

Then continue in DIMcomfort as described before. Don't forget to enter airflows for supply and exhaust manually in DIMcomfort when you use this type of transfer.





DIMsilencer

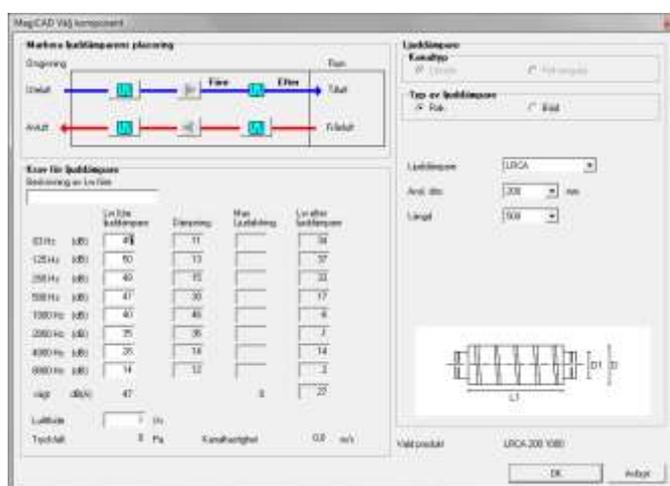
In DIMsilencer you can select Lindab silencers. DIMsilencer is an advanced software to state requirements, calculate results and compare Lindab silencers with each other are of great benefit to detect and solve sound problems in your duct design. Especially the possibility to use parametrical, will say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

Push the DIMsilencer button in MagiCAD 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.

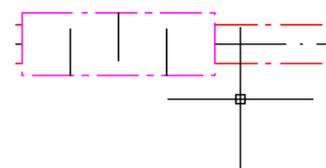
If you ran flow summation in MagiCAD before, the airflow will be transferred as well to calculate the sound generation; otherwise you can enter these values also manually.



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

Product code	Description	User code
LRCA 200 1000	Circular straight low-built silencer	LD23

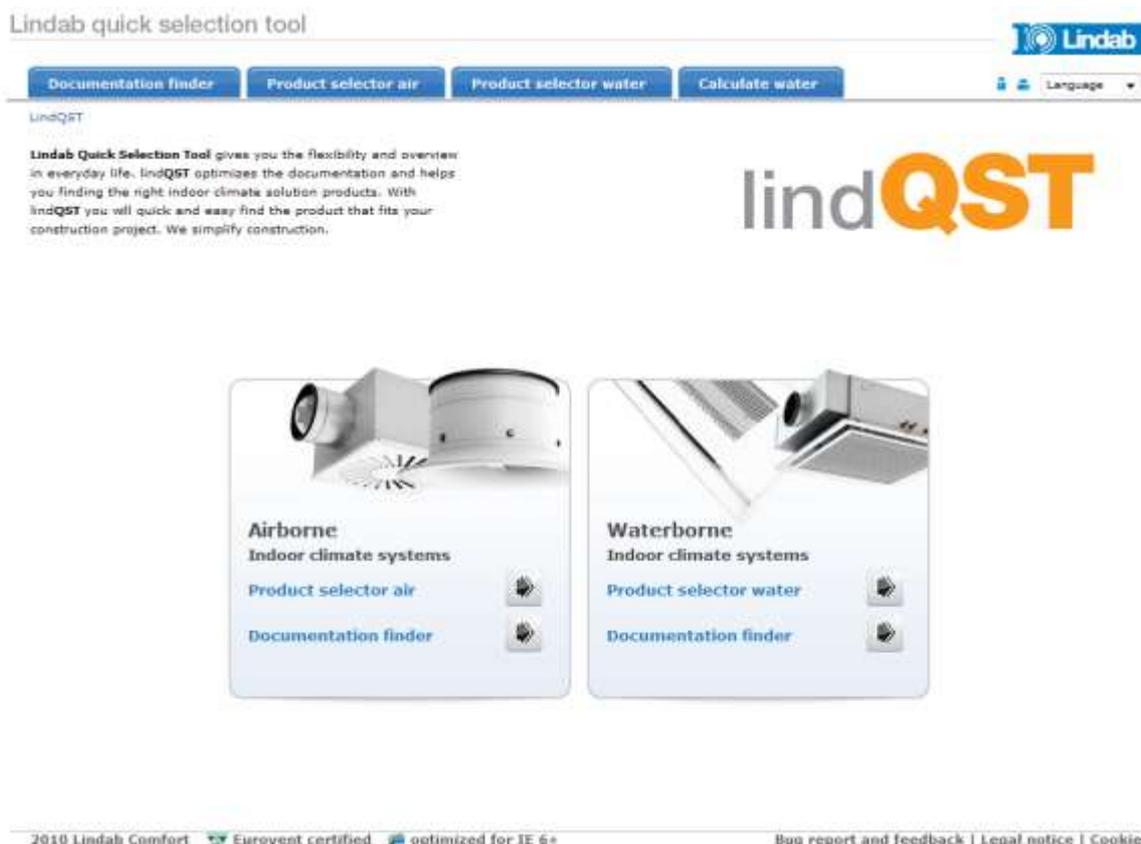
In the last step you click on the duct you want to insert your silencer into. You can even select larger or smaller ducts than the size of the selected silencer. MagiCAD will in this case insert reductions automatically.





LindQST

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



Push the LindQST button in MagiCAD to open a webbrowser and start LindQST and select a product selector.



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



Example for a diffuser selection:

1. Select a Product category or a room type to find suitable products.
2. Select a product or define the search parameters for the diffuser you want to select.
3. 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.
4. LindQST calculates the al diffuser which fulfill the requirements. Push on "Show Results" to get a list of calculated diffusers. In the selection you can even compare 2 or more products to each other for detailed information.

1

Product category

Roomtype

Product category

Ceiling diffusers Visible diffusers
 Industrial diffusers Wall diffusers
 Wall grilles Nozzles
 Ventiduct Grilles
 Displacement diffusers Theatre diffusers
 Lowimpulse diffusers VAV diffusers
 VAV dampers VAV accessories
 Airflow regulators Control valves
 Fresh air valves Overflow units
 Clean room difusers

2

Product selection

Product line

Product name

Connection size

Function

Plenum box

Design

Geometry

Spread pattern

3

Technical requirements

Air flow unit l/s m³/h

Air flow q_v^*

Sound power L_{WA} to dB (A)

Adjustment pressure Δp

Total pressure loss Δp_t

Max. throw $l_{0,2}$

* = these criterias must be completed
 Note: All technical datas are for 1 diffuser
 Note: $L_{pA} = L_{WA} - 4 \text{ db}$

Show Results

SEARCH RESULTS: 6



5. Select a diffuser to get a detailed report including the "Export to MagiCAD" button.

Number of products selected: 0

Article name	Spread pattern	Product height	$l_{s,1}$	$l_{s,K}$	Δp_1
LKA-160+MBB-125-160-S	4-way	265	3,6	34	42
LKA-160+MBB-160-160-S	4-way	299	3,6	34	33
LKA-250+MBB-125-200-S	4-way	265	2,9	33	61
LKA-250+MBB-160-200-S	4-way	299	2,9	36	32
PKA-160+MBB-160-160-S	4-way	299	2,2	34	35
PKA-200+MBB-160-200-S	4-way	299	2	27	27

LKA-160+MBB-125-160-S
4-way

Process and sound power diagram

Technical data

Export to MagiCAD

6. Push the button to close the web browser and enter a User Code in MagiCAD. Then place the diffuser into the drawing.

Lindab MagiCAD connection 2010.8.3

Product code	Description	User code
LKA-160+MBB-125-160-S	Ceiling diffusers	TD34

