

## Lindab MagiCAD Plug-In for DIMcomfort, DIMsilencer och LindQST

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

## Installation of MagiCAD Plug-In

Installation of Lindab MagiCAD Connection 2011.3.1

### Installation requirements

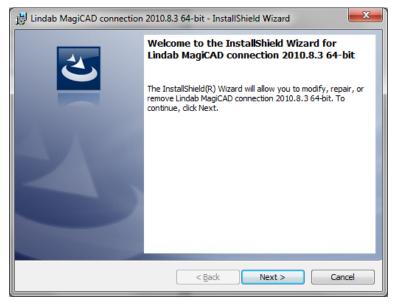
To be able to use the connection between the Lindab Software and MagiCAD you need to have at least MagiCAD 2010.5 installed after Progmans recommendations.

The Plug-in can be downloaded from:

http://itsolution.lindab.com/downloads/MagiCAD/Lindab MagiCAD connection 2011.3.1.zip

The Plug-in 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.

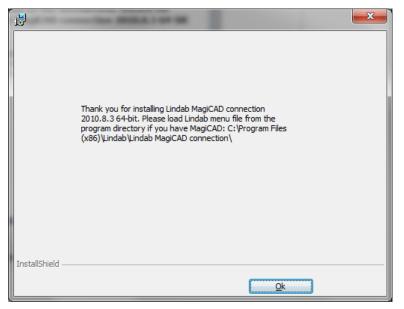


After the installation is completed you will see the screen below prompting you to





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/5.1/install.exe







#### DIMsilencer: http://itsolution.lindab.com/downloads/dimsilencer/5.1/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)

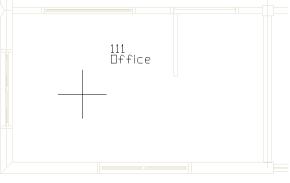
### DIMcomfort

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.





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





#### read only in DIMcomfort.

Otherwise you can always draft a Polyline to transfer the room boundaries into DIMcomfort. Press "m" to select room boundaries manuallay, 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.

Rums setup		<u>o</u>
Information		
Rums märke	Rum	G Jag vet kultflöde och önskad tilkuftstemperakur till nummet G Jag vet önskat kultflödet och värmeettekt i nummet
Rumstyp	Valj rumstyp 💌	
Ventilationstyp	Omblandande ventilation	G Jag vet max CD2-hak och önskad Hlutstemperatur till summet G Jag vet max CD2 hak och värmeeffekt i rummet
Elterklangstid	1.00 sek	C Jag vet max DD2 hak och värmeeffekt i rummet Jag vet tilluftstemperatur och tillförd effekt till rummet
Tillåten ljudnivå	30 dB(A)	
Rumstemperatur	20.0 C*	Angel Ang
Dimensioner		Demonstrate
Geometri	Rektangulär v	<u>ě</u>
Längd, L	4,80 m	
Bredd, B	2.90 m	Tillult Frählult
		Luftflöde i rummet 119 119 mP/h
		Tilutistemperatur (Ti) 18.0 °C 2.4 oms/h
		Tillöid temisk ellekt -79 W -6 W/m² 🕢
Våningshöjd	3,60 m	
Undertaks-höjd	3,60 m	
IV Ingerundertak		
Area	13,9 m²	
Volym	50,1 m <sup>2</sup>	
Vistelsezon		1
Hojd	1.80 m	
Höjd på hinder vid vägg	0,00 m	
Hastighet, Vx	0,20 m/s	
∏ Hjslp		0K Avlay



Product code	Description	Us	System
PC6-E-125+MBB-100-125-E	Plenumbox Perforated diffuser	FD24	3601-2 3601 Extract
NS19-V-S-0-160+MBB-100-160-S			3601-1 3601 Supply

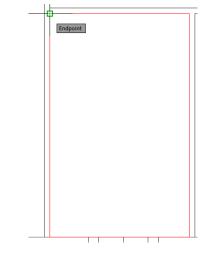






If you don't have the MagiCAD Room module you must draw the rooms boundaries manually using the AutoCAD Polyine function.

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.

▲ ▶ ▶ Model / Layout1 / Layout2 /							
Next	point	(press	Enter	after	the	last	point):
Next	point	(press	Enter	after	the	last	point):
Next	point	(press	Enter	after	the	last	point):
							i lami

Enter room height (mm) or <Enter> to default value 2700 mm:





#### 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.

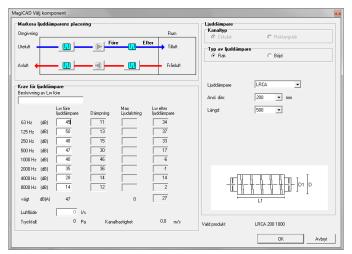
DIMsilencer will now open and you can enter the sound values before the silencer and the designated result after the silencer.

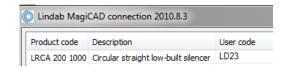
If you ran flow summation in MagiCAD before, the airflow will be transferred as well to calculate the sound generation; otherwise you can enter these values also manually.

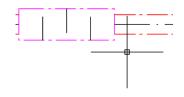
When you selected a silencer you press the "OK"-button. DIMsilencer will then close and MagiCAD dialog asks you to state a User Code.

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



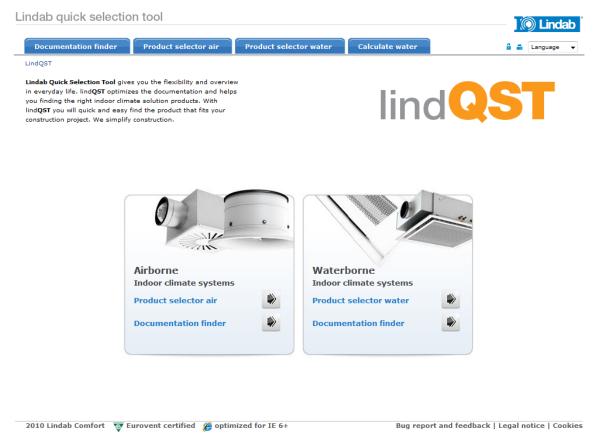








# LindQST is a new webbased selection tool for Lindabs Comfort product range including documentation.



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

Product category All rooms -Roomtype Product category Ceiling diffusers C Visible diffusers O Wall diffusers C Industrial diffusers C Wall grilles C Nozzles C Ventiduct C Grilles C Displacement diffusers C Theatre diffusers C Lowimpulse diffusers C VAV diffusers O VAV dampers C VAV accesories Control valves O Airflow regulators C Fresh air valves Overflow units C Clean room difusers

Product selector water

Product selector air

room type to find suitable products.





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.
- 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.

Product selection	Υ
Product line	Formo 💌
Product name	All 💽 🥝
Connection size	All
Function	Supply -
Plenum box	Yes 💌
Design	All
Geometry	Square plate 💌
Spread pattern	4-way 💌



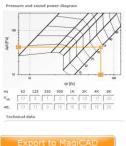
#### Technical requirements

Air flow unit	ତ l/s C m³/h	
Air flow	q <sub>v</sub> * 70	
Sound power	L <sub>wA</sub> 25 ▼ to 35 ▼	dB (A)
Adjustment pressure	Δp	Pa
Total pressure loss	Δp <sub>t</sub>	Pa
Max. throw	l <sub>0.2</sub>	m
* = these criteri	as must be completed	
Note: All technic	al datas are for 1 diffus	er
Note: $L_{pA} = L_{wA}$	- 4 db	

#### SEARCH RESULTS: 6

Number of	products selected: 0						
	Article name	Spread pattern	Product height	I <sub>0.2</sub>	L <sub>wA</sub>	Δpt	
	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	53	
	LKA-200+MBB-125-200-S	4-way	265	2,9	33	61	
	LKA-200+MBB-160-200-S	4-way	299	2,9	28	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	









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

1	6	Lindab	MagiCAD	connection	2010.8.3
1	9	LINGOD	magicab	connection	2010.0.5

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



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

