

# **CADvent Plug-In for AutoCAD**

*for version 1.7 AutoCAD only*



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# Manual for Lindab CADvent Plug-in for AutoCAD

## General Information

The Lindab CADvent Plug-In is developed to support CADvent advanced production orientated features on top of MagiCAD using the production orientated objects in MagiCAD.

Additional to this, the Plug-In offers features that are also available on computers without MagiCAD.

Please read more about this in 'List of functions and User Interface'

## Installation and activation

The latest version of the CADvent Plug-in can be downloaded from <http://itsolution.lindab.com/downloads/cadventplugin/cadventplugin.exe>

## Installation requirements

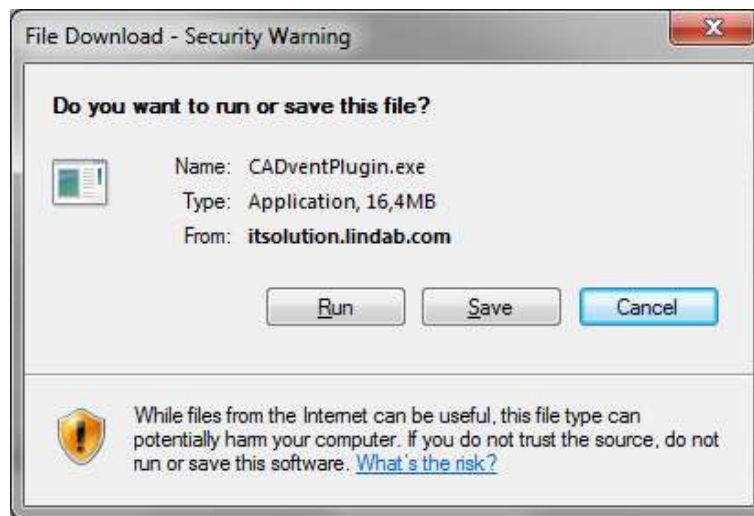
The CADvent plugin supports AutoCAD 2010 to 2015 on 32 or 64 bit computer.

For the extended version the plug in requires MagiCAD 2013.11 which runs on AutoCAD 2010 to AutoCAD 2014 or MagiCAD 2014.4 for AutoCAD 2010 to 2015 on 32 or 64 bit computers. The plugin supports Windows 7 and Windows 8.

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



## Installation process



Download the installation file and save it on your computer for later installation or install it by pushing the “Run” button. If you have an earlier version of CADvent Plug-In installed the installation process first likes to uninstall the current version of the Plug-In.



Press *Next* and in the following *Window Remove* to uninstall the current version.

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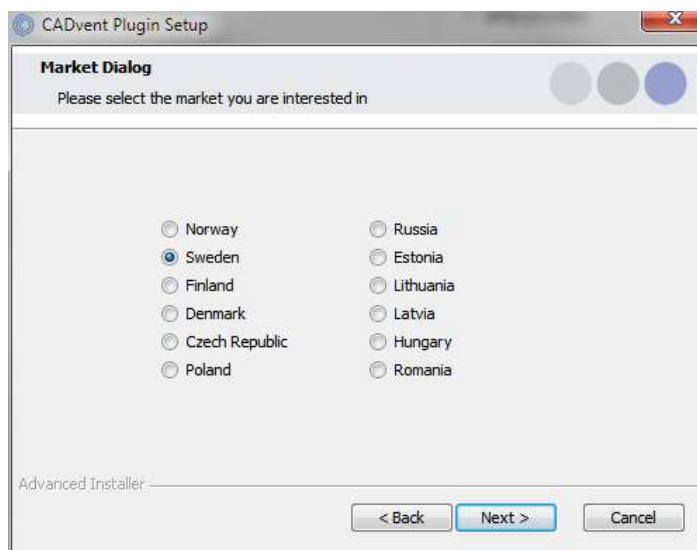


Now you can install the software. Please activate the installation file again. The newest features can be listed up with the link you can find in the middle of the pop up window.



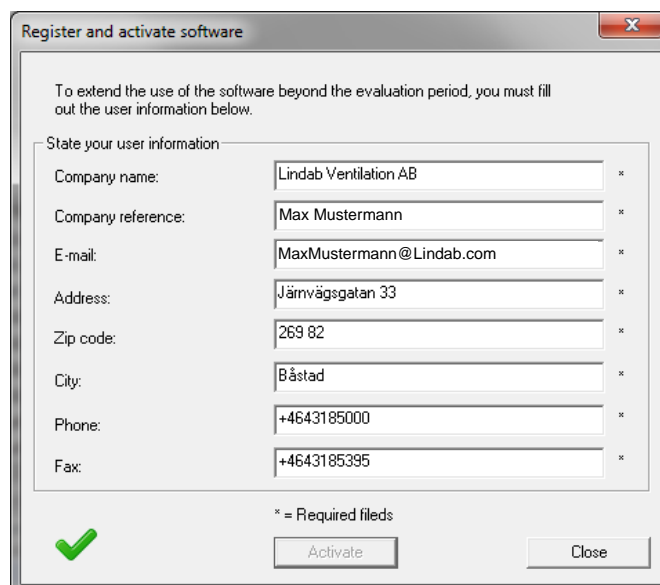


The next dialog ask you to select a market area. The selection includes certain translations and local settings for the production such as standard duct lengths and flange types:



At the end of the installation process you will be asked to register the software. Enter your contact details and press “Activate”, the green tick confirms the activation. Then close the dialog by pressing the “Close” button.

NOTE: You need to be online for the registration process.



Now the installation is completed and you can launch MagiCAD including the CADvent Plug-in.



## List of functions and User Interface

### Graphical User Interface for CADvent Plug-In

The Graphical User Interface for CADvent Plug-In without MagiCAD

The CADvent Plug-In on computers without MagiCAD contains a Ribbon palette to access the commands.



### List of functions



Create a 3D space object to add room informations for uploading to lindQST, to calculate air devices or water products optimized for the specific room requirements



Upload the 3D spaces to lindQST



## Add Space

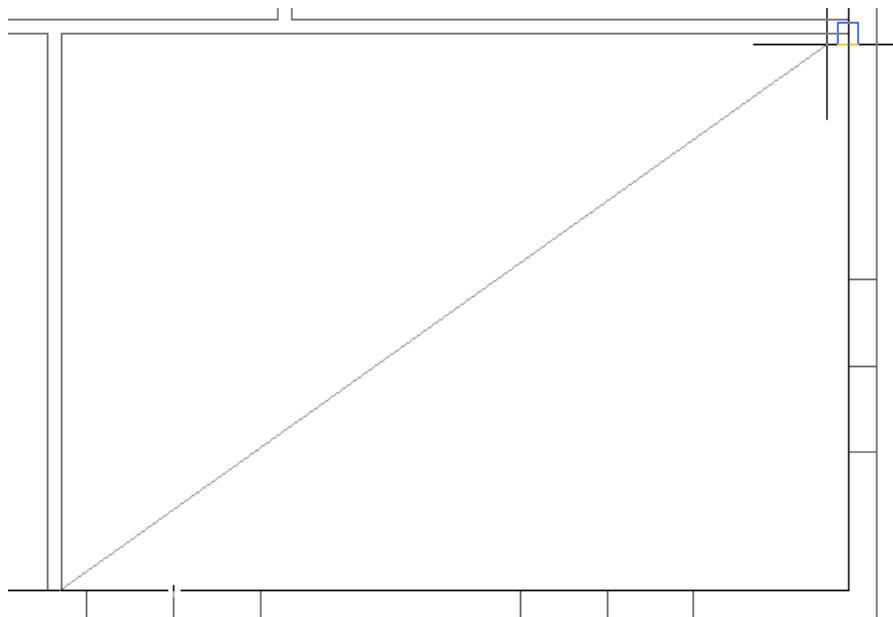


The 3D Space element gives the user the possibility to create 3D objects in the drawing to create zones. The zones can be created as simple rectangular boxes (default) or as Polylines (Type P in the command Line, or activate Polyline on the right click menu) to create zones which follow the architecture.

The Space object allows the user to divide the drawing into several rooms or zones which can be uploaded to LindQST, the Lindab Quick Selection Tool, for selecting and calculating water and air products.

Rectangular rooms:

- Activate the *Add Space* command.
- Click on one edge of the room
- Click on the opposite edge of the room

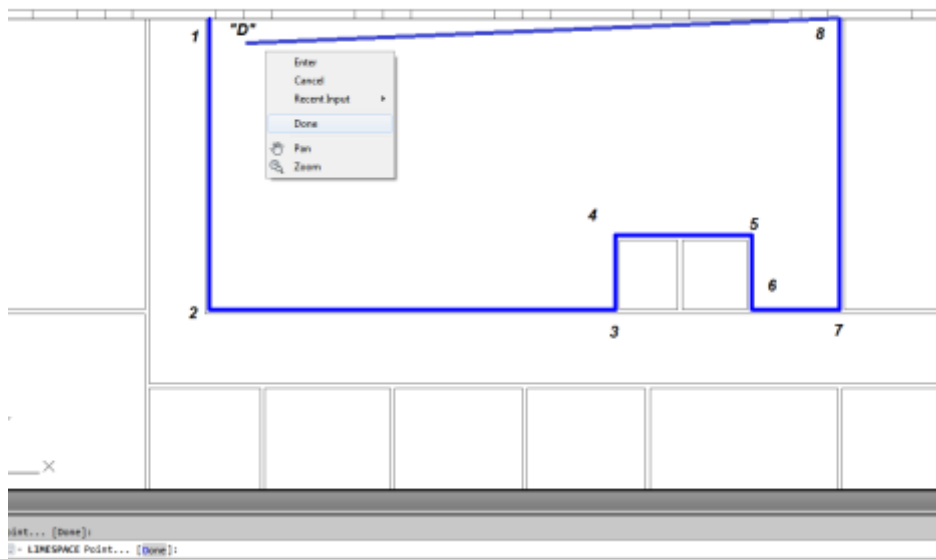


*Define a rectangular space object*

Non rectangular room:

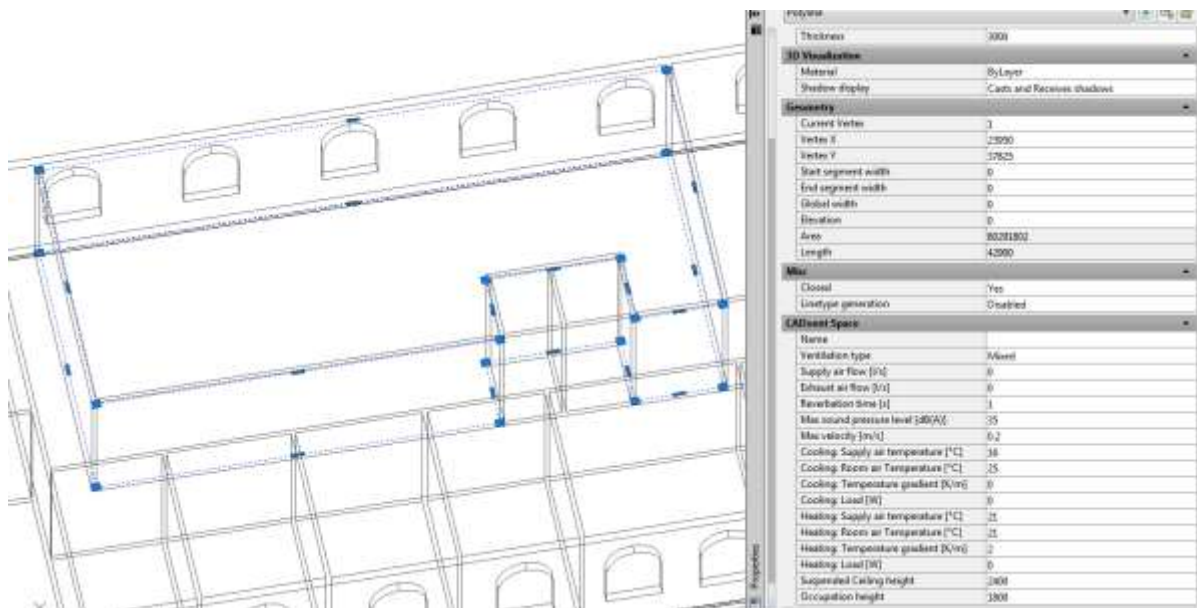
- Activate the *Add Space* command.
- Type P in the command line to activate the polyline command
- Click on one edge of the room
- Follow the walls of the room, by clicking on each edge
- Stop at the last edge and type D (done) to close the Polyline





Define a non-rectangular space object

When you have created a zone you can change the parameter in the AutoCAD Properties to define the requirements for the room.



CADvent Space in drawing with AutoCAD properties

- |                                     |  |
|-------------------------------------|--|
| Thickness:                          | Height of the space object                 |
| Name:                               | Name of the Room/ Zone ( <b>required</b> ) |
| Ventilation Type:                   | Mixed, Displacement or Chilled Beams       |
| Supply and Exhaust air flow in l/s: | Total air volume for this room/space       |



Reverberation time in s:	Sound reverberation time
Max. sound pressure level in dB(A):	Max allowed sound level in the occupied zone
Max. velocity in m/s:	Allowed average air velocity in the occupied zone
Occupation distance:	Max. distance from displacement unit where the air velocity is allowed to prevail
Cool./Heat. Supply air temp. in °C:	Temperature of the supply air
Cool./Heat. Room air temp. in °C:	Temperature of the room air
Cool./Heat. Load in W:	The required power for the room
Suspended ceiling height:	Distance from floor to suspended ceiling
Occupation height:	Height of the occupancy zone

You can edit the zone afterwards by dragging on the AutoCAD Grip points in the corners or on the lines.



## lindQST Upload

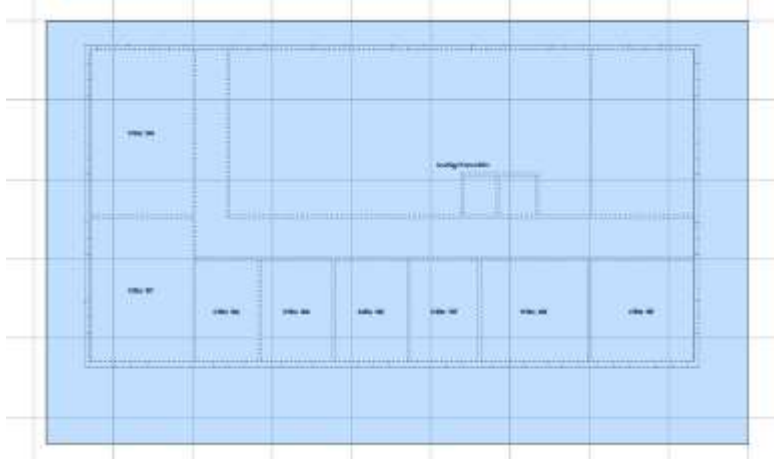
**QST**lindQST  
Upload

After creating rooms / zones with the Add Space command you can upload the spaces into lindQST.

**Note: The upload is not limited to a single room. You can upload multiple rooms in one process.**

1. Activate the lindQST Upload command
2. Mark all spaces you like to update to your project in lindQST.

**Note: You can all time add more spaces to your project in lindQST**



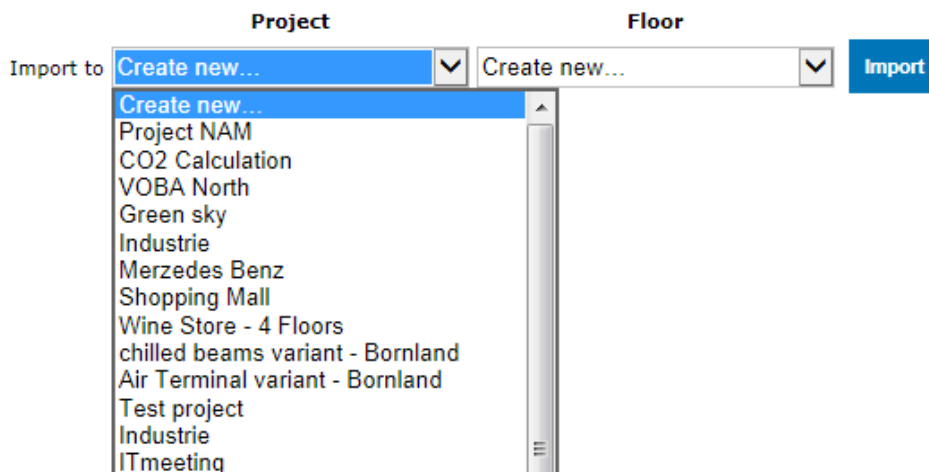
*Mark multiple CADvent spaces for the upload to lindQST*

3. Accept your selection with Enter
4. A browser window opens and ask you to log in.
5. Please enter your login data or register for the project area in LindQST



*lindQST welcome page for non registered or logged out users*

- The following window allows you to add the spaces to an existing or a new project. Please select your choice from the drop down menu. If you chose an existing project, you can select from existing floors or add a new.



*lindQST project selection*

- If you select 'Create new...' for project and floor, Lindqst will automatically name the project and floor „AutoCAD“, which you can rename in a later state.



## Import AutoCAD Space

Import completed: [Project Manager](#)

*lindQST verification of the project upload and link to Project Manager*

- The import complete message confirms the correct upload process. Using the Project Manager link jumps you directly to your project in lindQST.

The screenshot shows the AutoCAD project tree on the left and the Results Velocity diagram table on the right.

Ventilation type	Heating		Cooling	Required Result	
	Required	Result		Required	Result
Temperature difference		9.0 K	Supplied thermal power	0	0 W
Sound pressure level	35	0 dB(A)	Supplied thermal power / area	0	0 W
Total supply air volume	100	0 l/s	<b>Heating</b> Supplied thermal power	0	0 W
Total exhaust air volume	100	0 l/s	Supplied thermal power / area	0	0 W

*lindQST project tree*

- Here you can define a suitable diffuser or chilled beam based on the given room size and technical requirements.

