



## Swegon Room Unit Designer MagiCAD Cloud Plugin for AutoCAD

13/04/2026

## Content

<b>1</b>	<b>GENERAL</b>	<b>3</b>
1.1	How to install plugin	3
1.1.1	Required third-party software	3
1.1.2	Installation	3
<b>2</b>	<b>STARTING THE PROGRAM</b>	<b>4</b>
<b>3</b>	<b>HOW TO USE THE PLUGIN</b>	<b>6</b>
3.1	Insert Product	6
3.2	Product Calculation	8
3.3	Product Sound Calculation	11
3.4	Open Room	11
3.5	View Isolevel	21
3.6	Room Calculation	23
3.7	About	25

## 1 General

This document contains instructions on using Swegon Room Unit Designer (=RUD) plugin for MagiCAD for AutoCAD. The purpose of the plugin is to integrate Swegon RUD selection- and room visualization tool RUD into MagiCAD for AutoCAD. It allows user to find and insert Swegon air diffusers and water products in to MagiCAD for AutoCAD project. In addition, plugin integrates RUDs room designer functionalities into MagiCAD project allowing users to design the air distribution in rooms.

### 1.1 How to install plugin

#### 1.1.1 Required third-party software

Swegon MagiCAD plugins works with the following MagiCAD versions:

- MagiCAD for AutoCAD 2026 and AutoCAD 2023-2026
- MagiCAD for AutoCAD 2027 and AutoCAD 2023-2027

#### 1.1.2 Installation

1. Download setup file from  
<https://portal.magicad.com/download/ProductSearch?searchStr=Swegon&categoryId=3>
2. Ensure that you have required MagiCAD version installed on your computer.
3. Install the plugin by running the downloaded installer

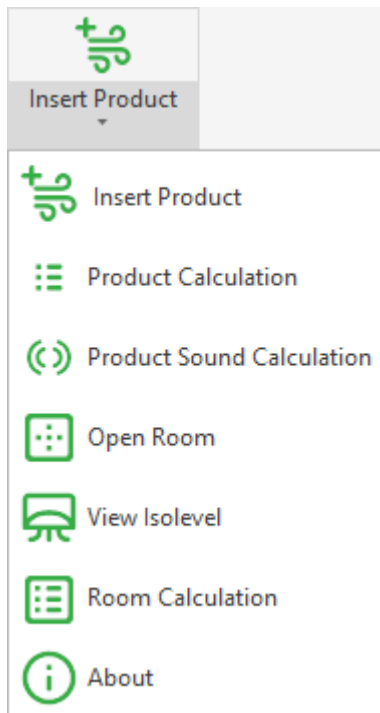
Administrator privileges are recommended for installation. **Note if you have several AutoCAD versions on your workstation:**

Before you run the installation program, start MagiCAD to make sure that *Swegon MagiCAD Plugin* installs on the same AutoCAD platform as MagiCAD.

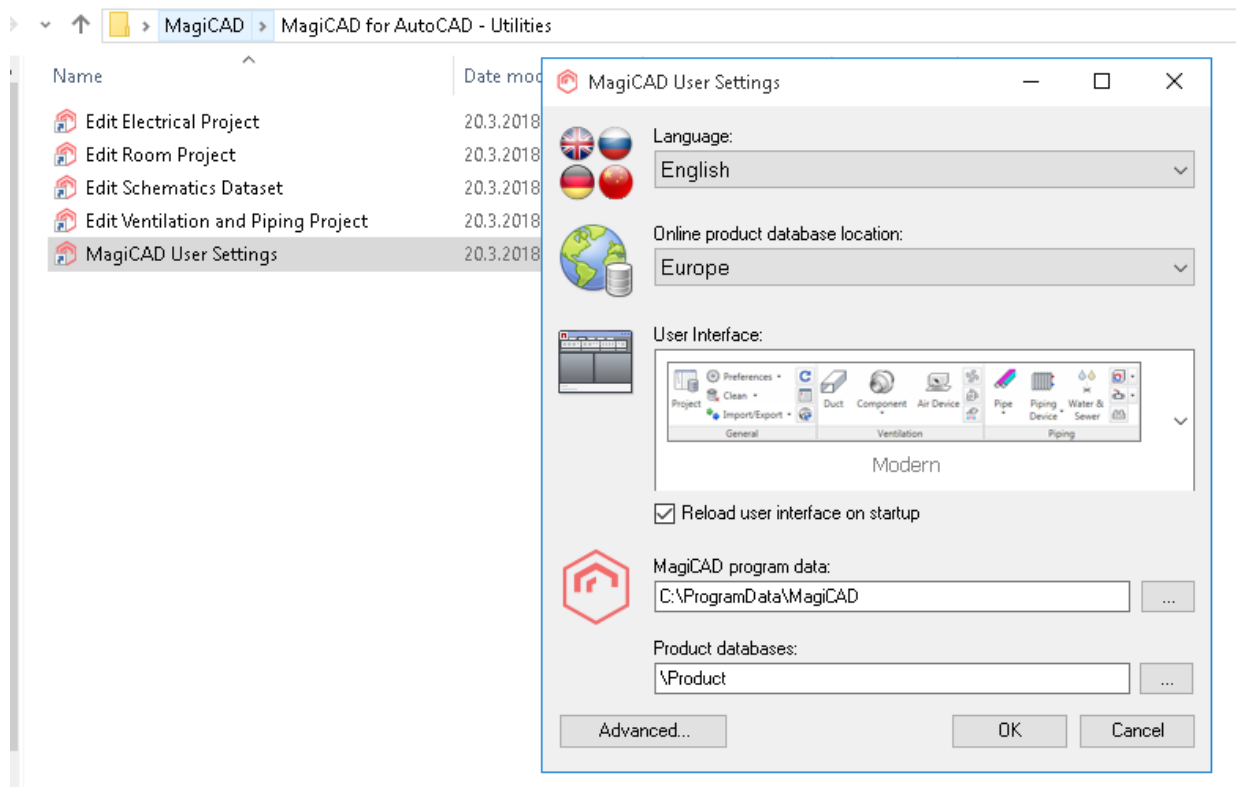
## 2 Starting the program

Before you start using *Swegon RUD MagiCAD Plugin*, start MagiCAD and open MagiCAD project.

You will find Swegon RUD MagiCAD plugin ribbon panel under MagiCAD Connect tab.



If ribbon is not loaded after MagiCAD is started, close AutoCAD&MagiCAD and open MagiCAD User Settings-dialog which is located in desktop MagiCAD folder in MagiCAD for AutoCAD – Utilities. In dialog select "Reload user interface on startup" and press ok. Start MagiCAD again.



### 3 How to use the plugin

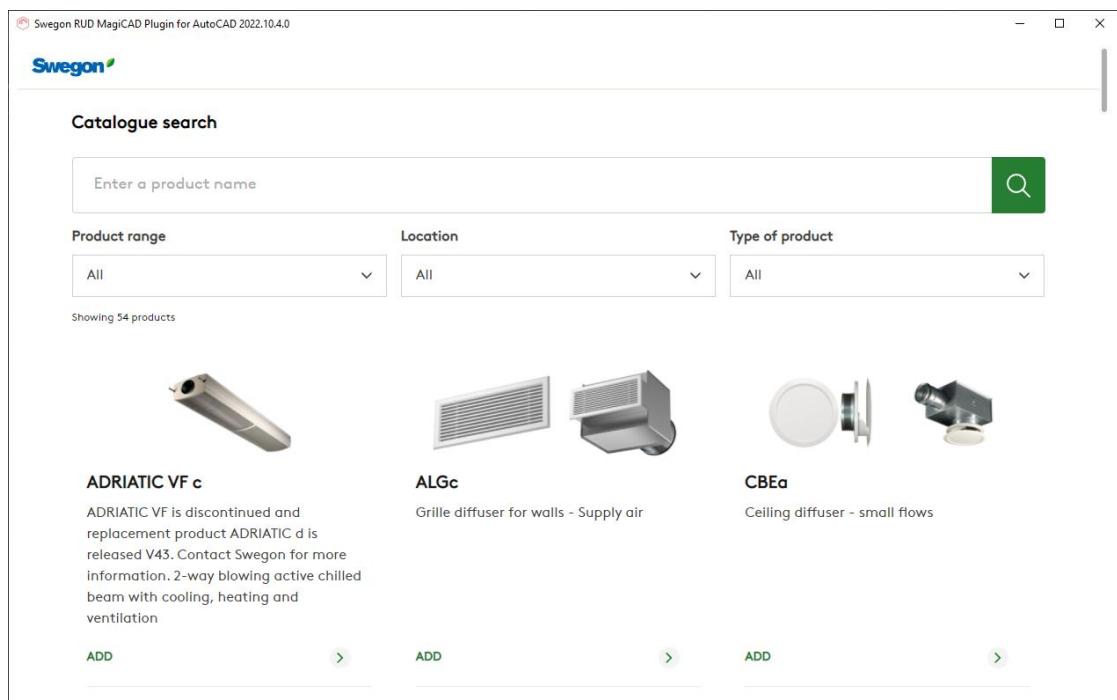
Swegon RUD plugin contains 7 commands:

- Insert Product
- Product Calculation
- Product Sound Calculation
- Open Room
- View Isolevel
- Room Calculation
- About

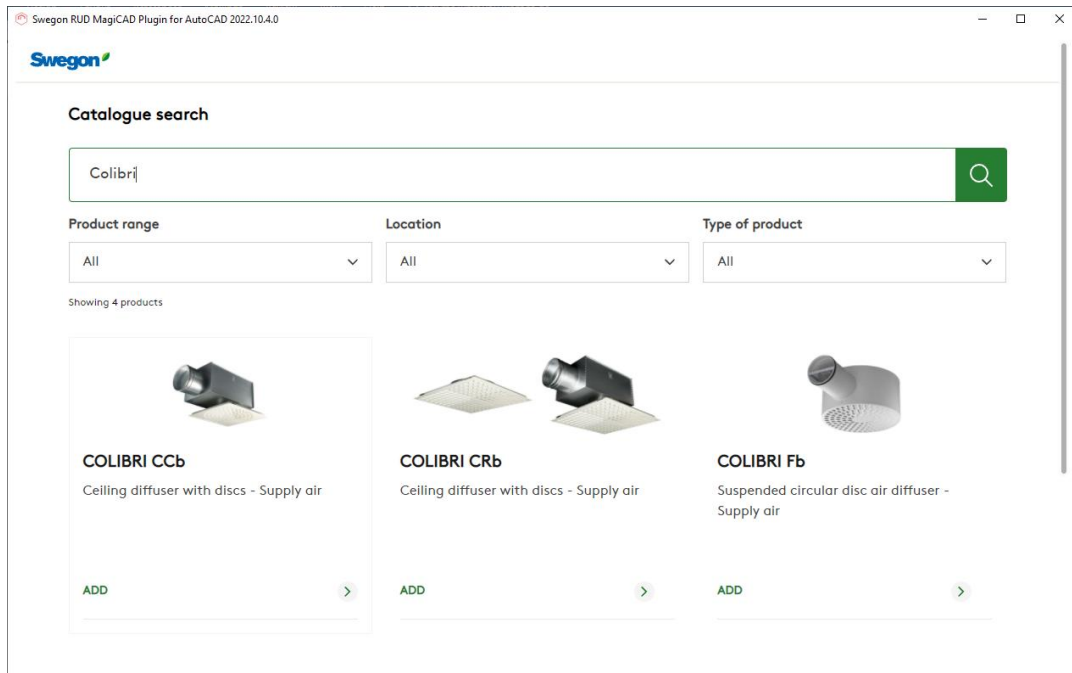
#### 3.1 Insert Product

This command opens RUD for selecting suitable air diffuser or water products into MagiCAD project. Follow these steps to insert products from RUD to MagiCAD project:

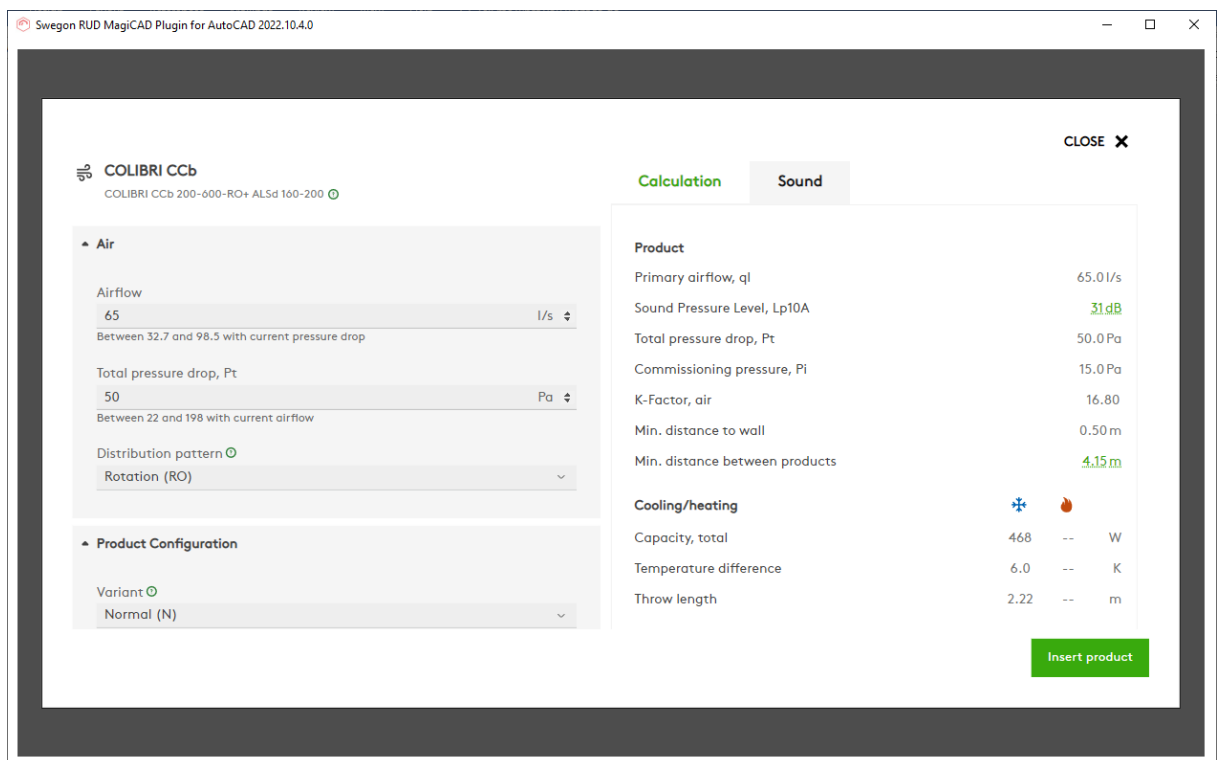
1. Click the “Insert Product” -button from Swegon RUD ribbon panel. Plugin opens RUD in browser control window:



2. Proceed by searching for the product by name or by using filtering options.

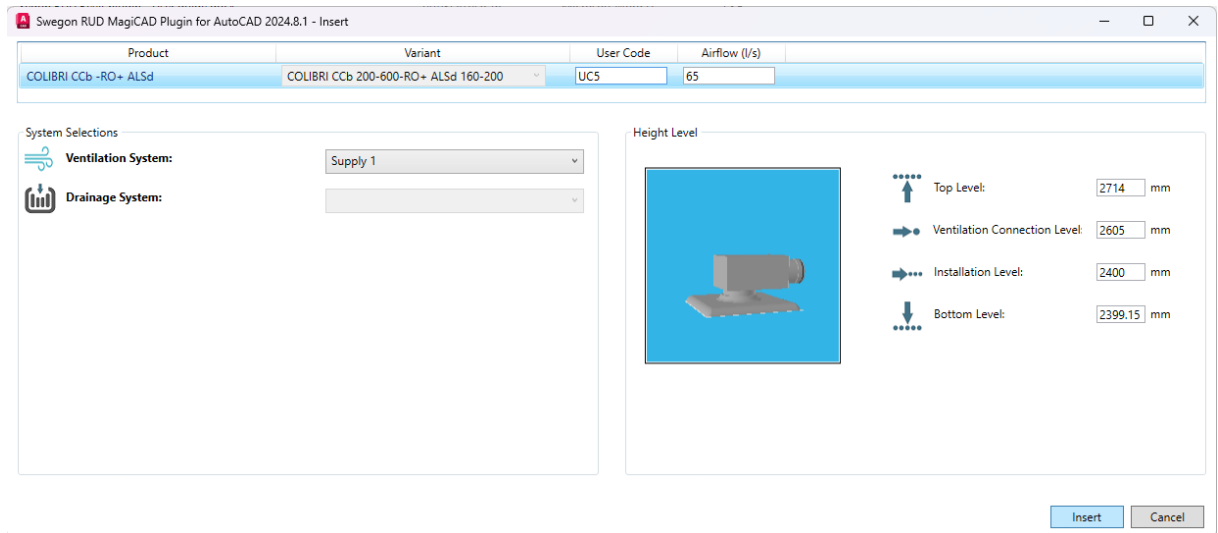


3. Click Add -button and then configure the product to match your needs:



Once the product is configured click “Insert product” -button in order to initiate product insertion to MagiCAD.

#### 4. Plugins Insert Product view is opened:



Product	Variant	User Code	Airflow (l/s)
COLIBRI CCB-RO+ ALSd	COLIBRI CCB 200-600-RO+ ALSd 160-200	UC5	65

**System Selections**

Ventilation System: Supply 1

Drainage System:

**Height Level**

Top Level: 2714 mm

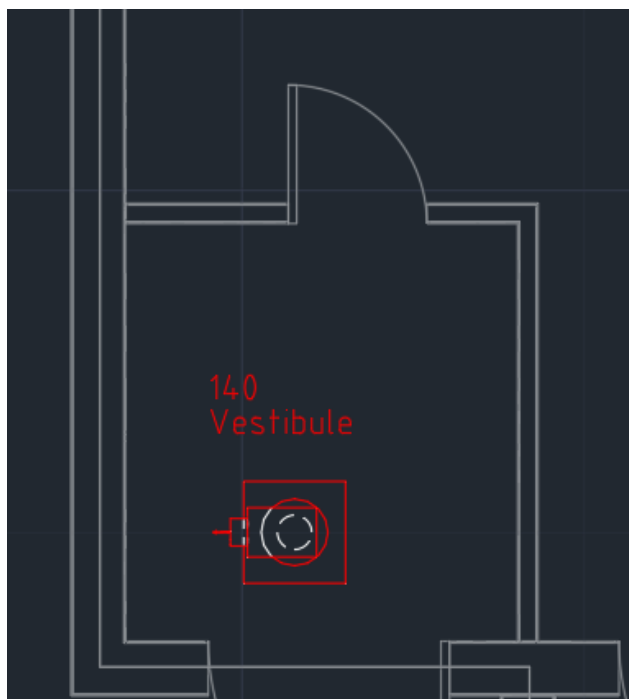
Ventilation Connection Level: 2605 mm

Installation Level: 2400 mm

Bottom Level: 2399.15 mm

Insert Cancel

From there you can set the user code for the product and make required system selections and set the height level for the product. After that click “Insert” -button in order to place to product to MagiCAD drawing:



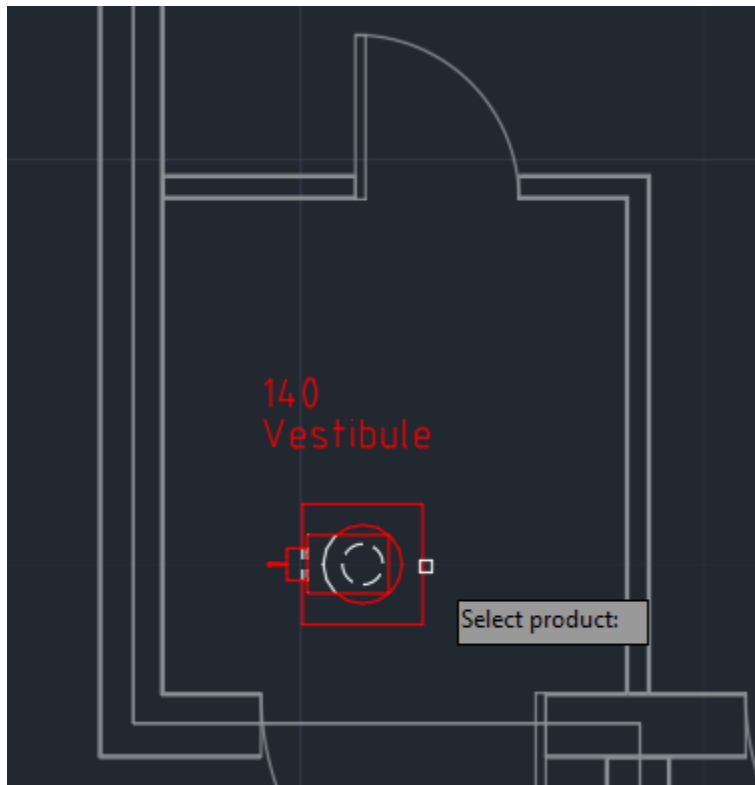
## 3.2 Product Calculation

This command allows user to view product calculation results in RUD.



Follow these steps to view the results:

1. Click the “Product Calculation” -button from Swegon RUD ribbon panel. User is requested to select the product which calculation results he/she wants to view. If there was already Swegon product selected in the drawing, it is automatically used as selected product.



2. Product Calculation results view is opened from RUD:

Swegon RUD MagiCAD Plugin for AutoCAD 2022.10.4.0

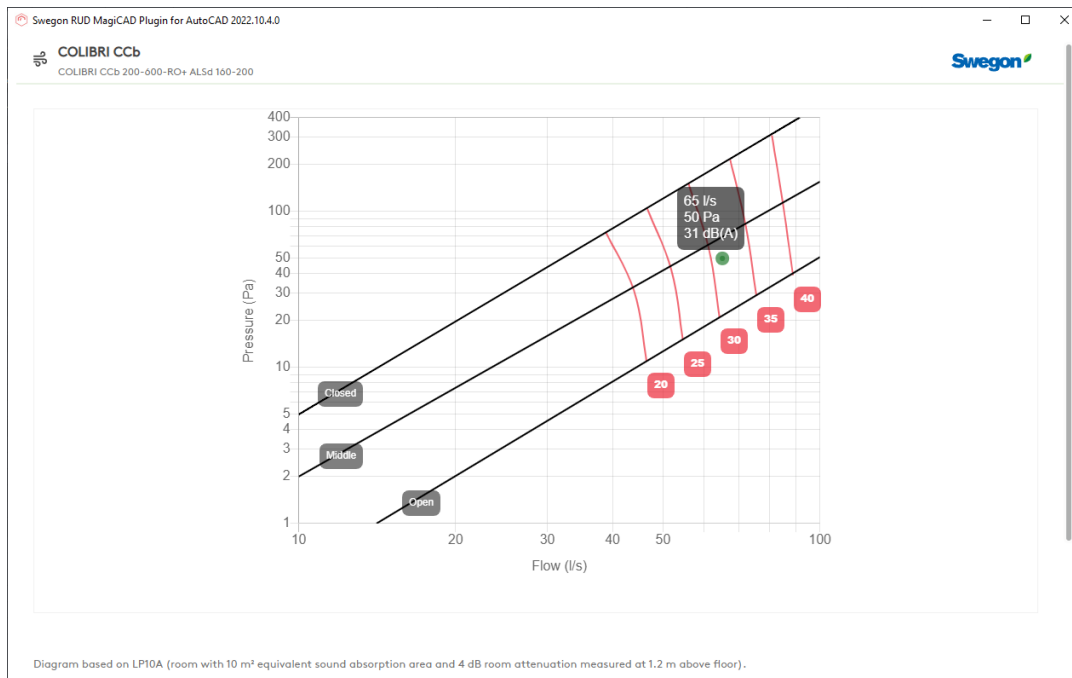
COLIBRI CCB  
COLIBRI CCB 200-600-RO+ ALSd 160-200

Swegon

	+	+	
<b>Input</b>			
Room temperature	24.0	--	°C
Supply air temperature	18.0	--	°C
<b>Product</b>			
Primary airflow, q <sub>p</sub>			65.0 l/s
Sound Pressure Level, L <sub>p10A</sub>			31 dB
Total pressure drop, P <sub>t</sub>			50.0 Pa
Commissioning pressure, P <sub>i</sub>			15.0 Pa
K-Factor, air			16.80
Min. distance to wall			0.50 m
Min. distance between products			4.15 m
<b>Cooling/heating</b>			
Capacity, total	468	--	W
Temperature difference	6.0	--	K
Throw length	2.22	--	m

### 3.3 Product Sound Calculation

Product sound calculation command works in similar way as Product calculation command. Once the product has been selected, the sound calculation view is opened in RUD:

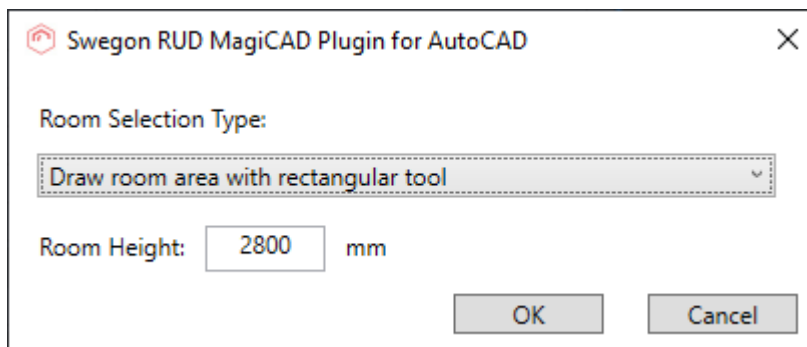


### 3.4 Open Room

Open Room command allows user to select the room area from MagiCAD drawing and export the room geometry to RUD. User can add products to the room in RUD and take advantage of room designer functionalities in RUD. Once the ventilation design for the room is ready, user can import the products to MagiCAD project.

Follow these steps to use the Open Room command:

1. Click Open Room -command from the plugin ribbon panel.
2. Following view is opened:

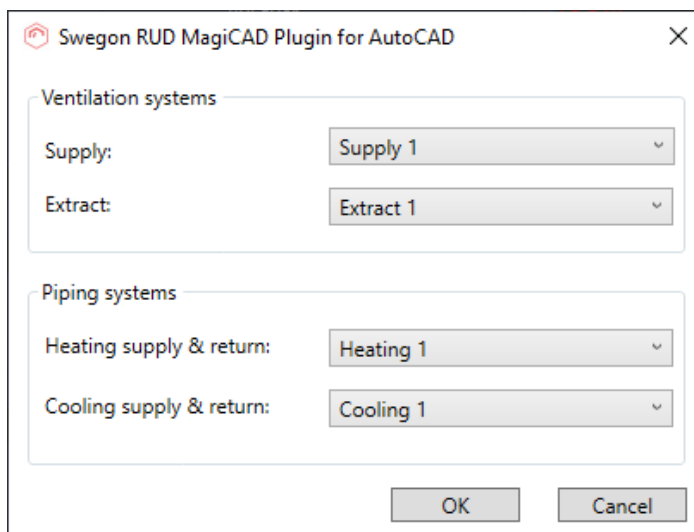


From the view user can choose how to select the room area from the drawing. User can also set height of the room from this view. The default room height is always the floor height in MagiCAD project settings.

3. Once OK-button is clicked, user is asked to select the room area:

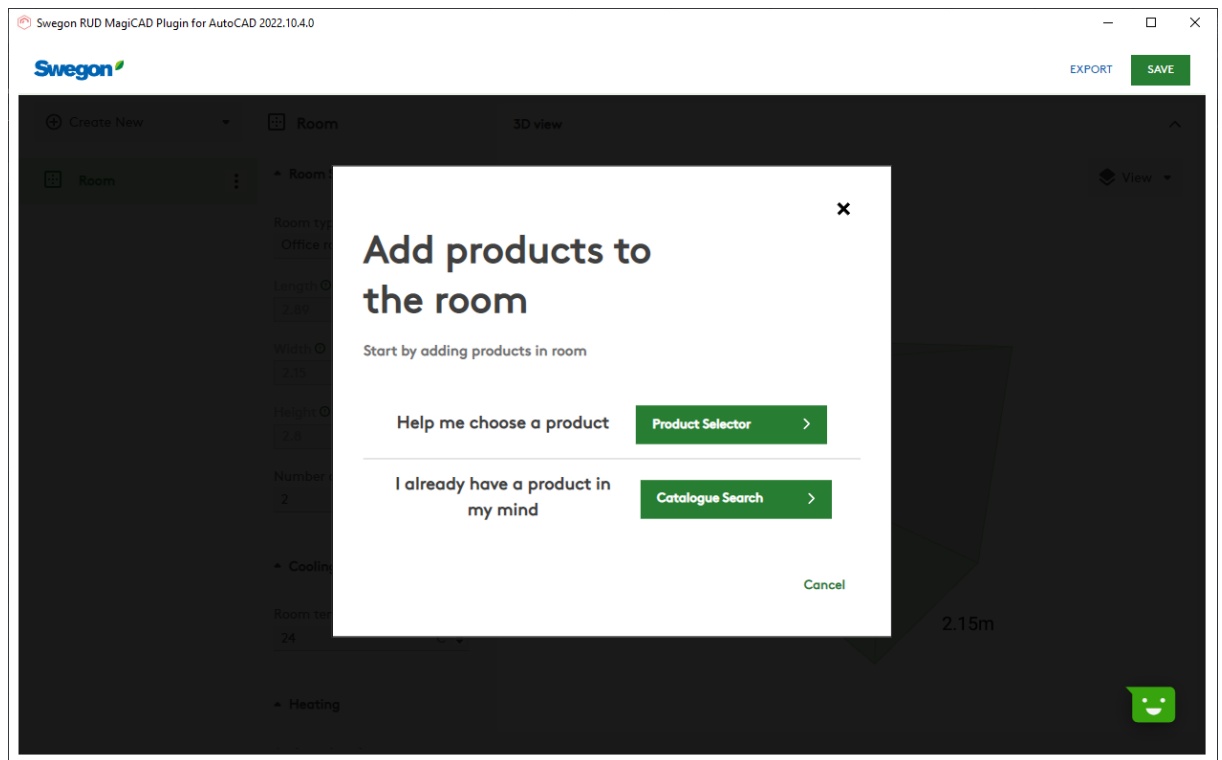


4. Next user is asked to make system selections used in the room:

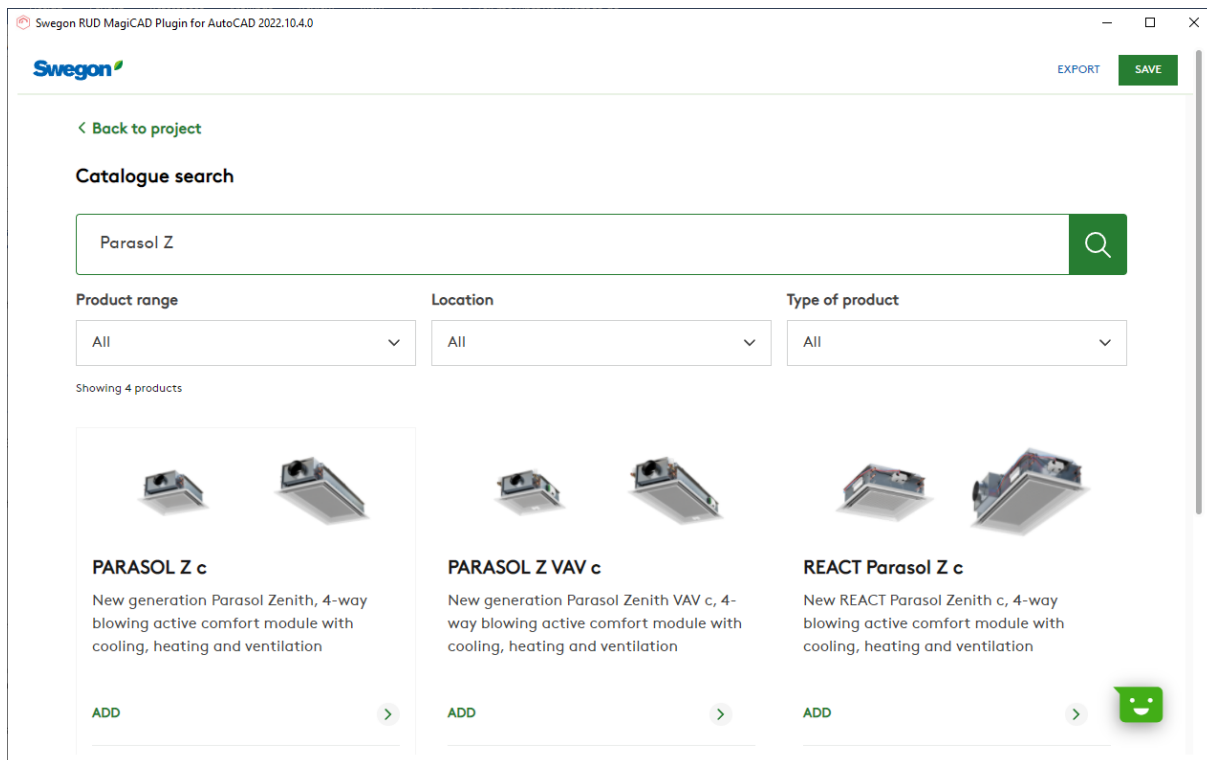


If there were already Swegon products in the room, the system selections will be inherited from the products. In this particular example case, there was no products in the room yet, so user first proceeds by making required system selections and then clicks OK.

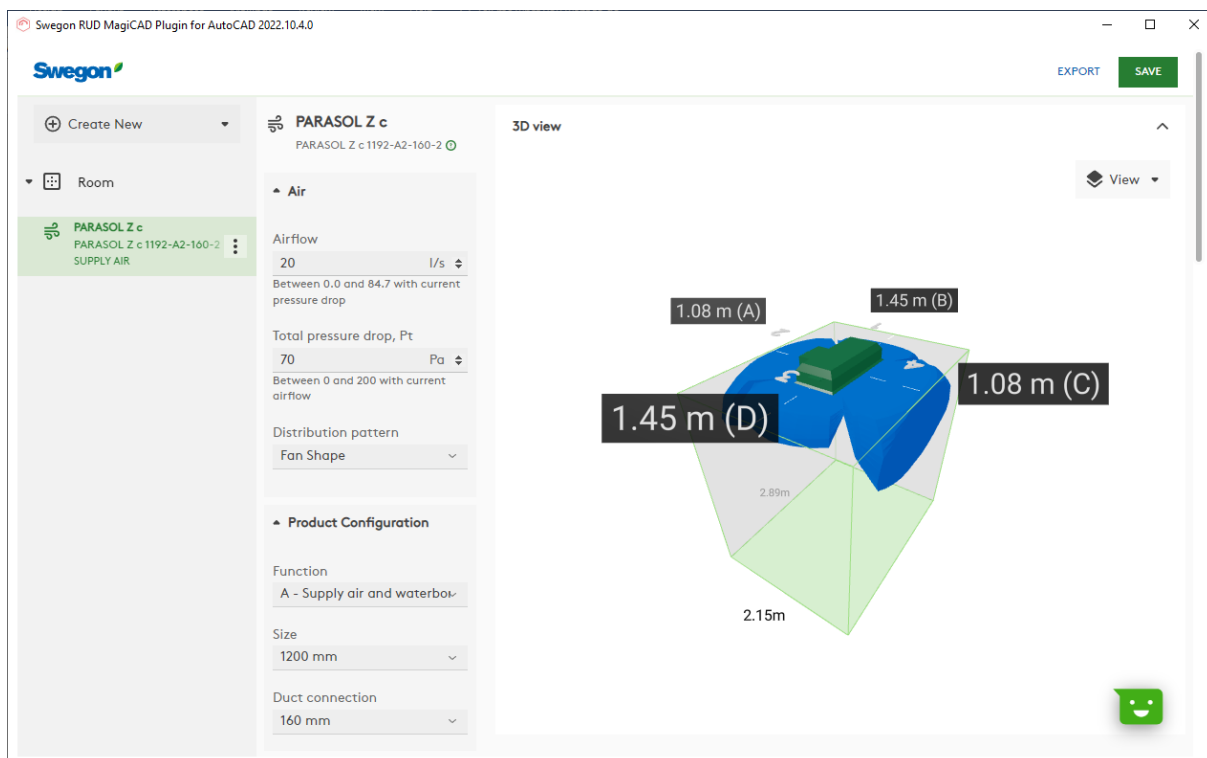
5. Swegon RUD is opened and as there was no products in the room yet, user is directed to select products to the room:



6. User proceeds by selecting wanted product to the room:

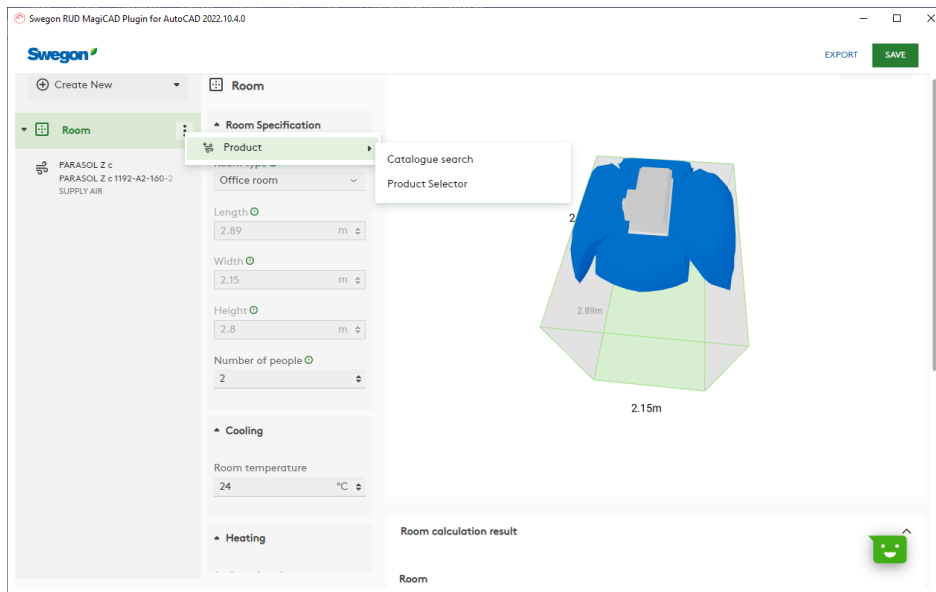


7. Room is now loaded to RUD and selected product is placed to the room:



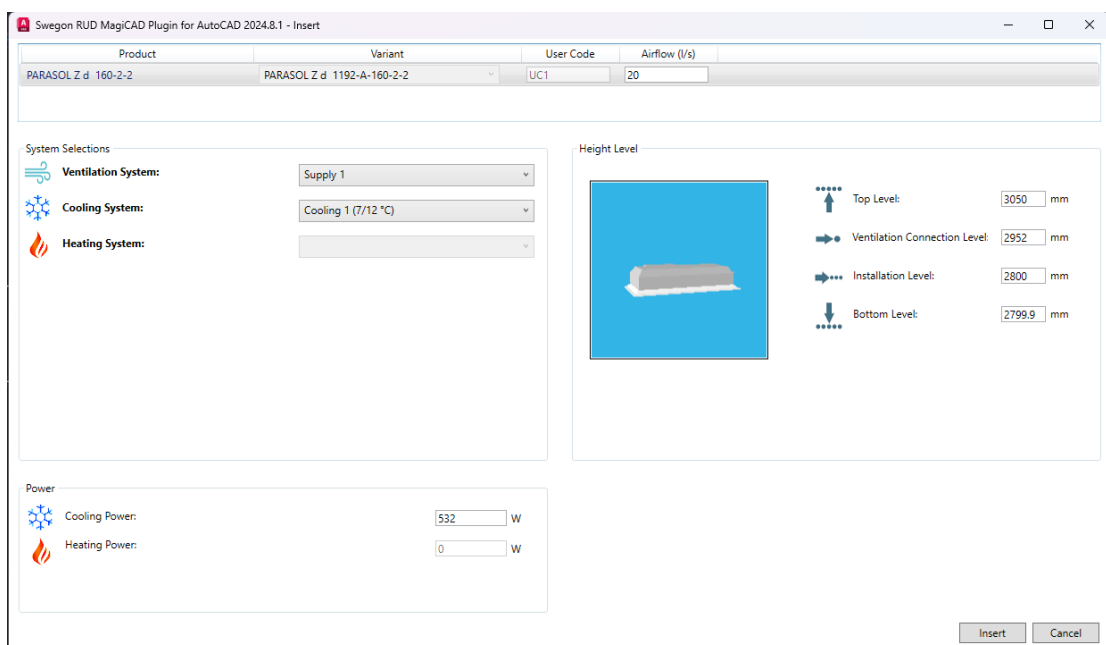
User can now make wanted modifications and configurations to the product placed to the room, such as change airflow, modify the size of the product, or move the product to wanted position.

8. Next user could proceed by adding another product to the room:

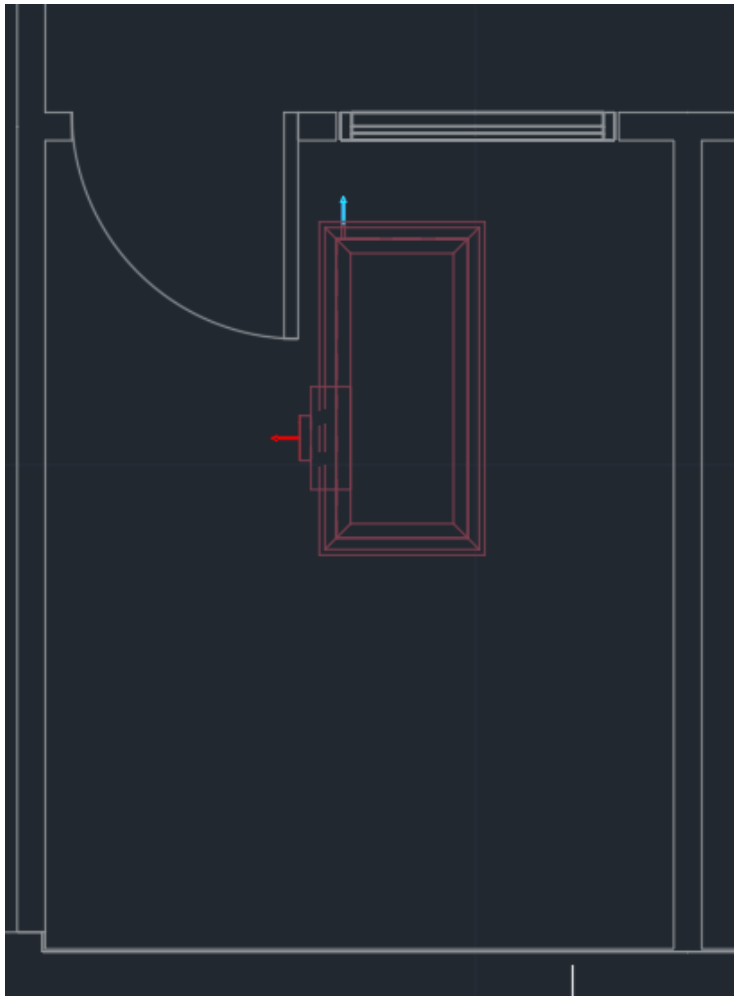


In this example case, no more are added, so user proceeds by clicking the “Save” -button which sends the modifications made in RUD back to MagiCAD.

9. Insert Products view from the plugin is opened:



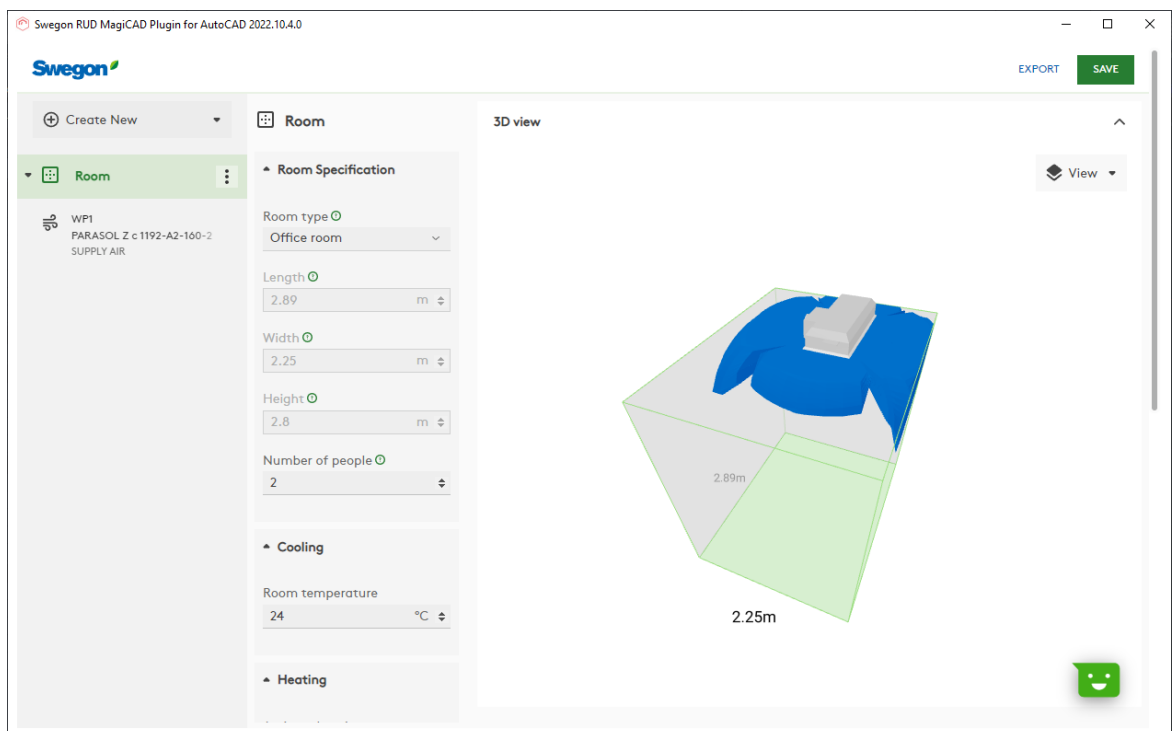
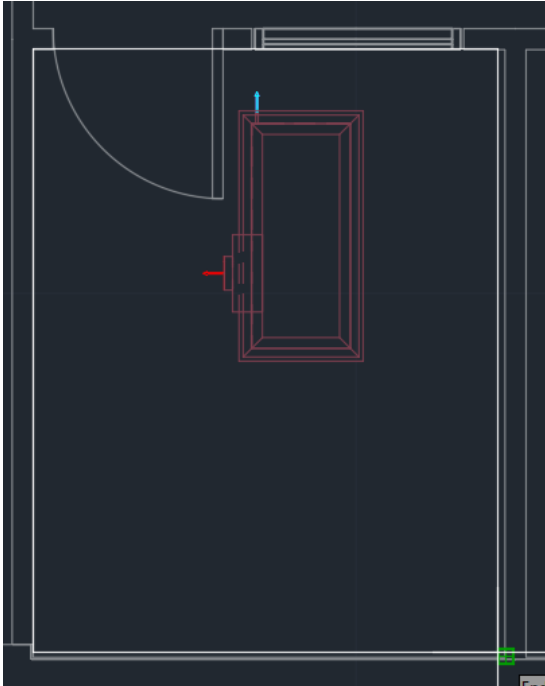
User proceeds by setting the user code and then clicks the “Insert” -button in order to place the product(s) to the room in MagiCAD. Notice that the height level as well as the position of the product is automatically set based on the position that was defined in RUD:



The command is now completed.

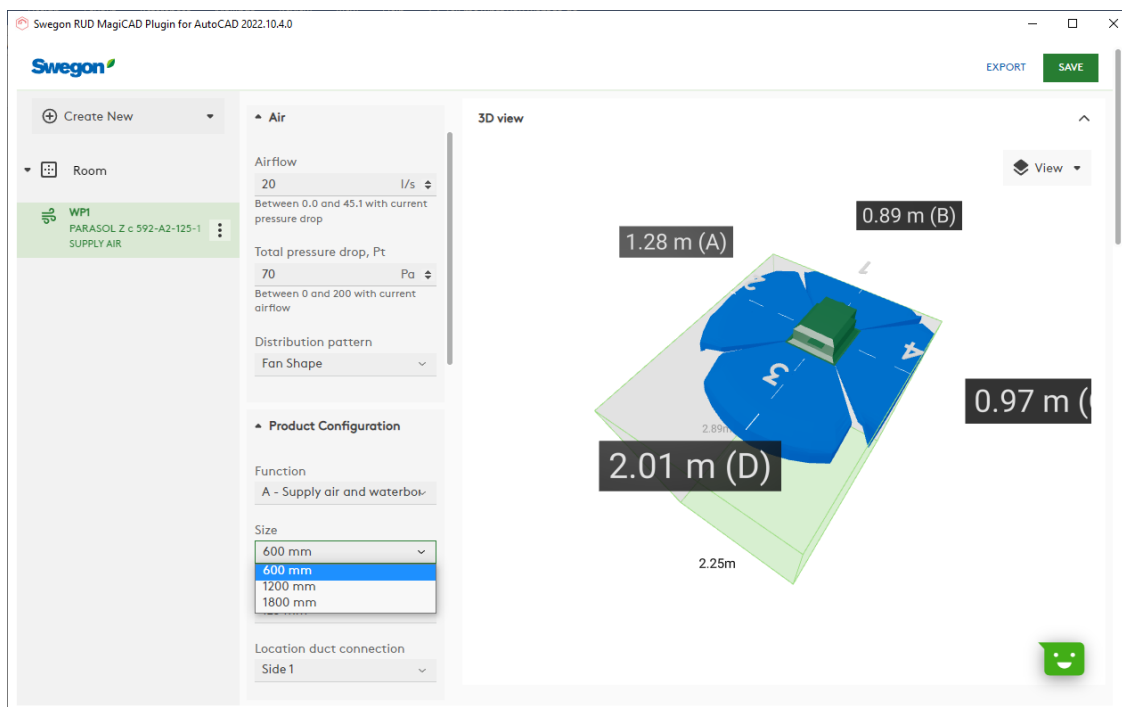
10. User can re-open the room in RUD any time he/she wants with Open Room command. When the room is now selected again, also the existing products in the room are recognized and can be modified in RUD (Notice that also the Swegon products that have been inserted from MagiCAD product database are recognized by the plugin):



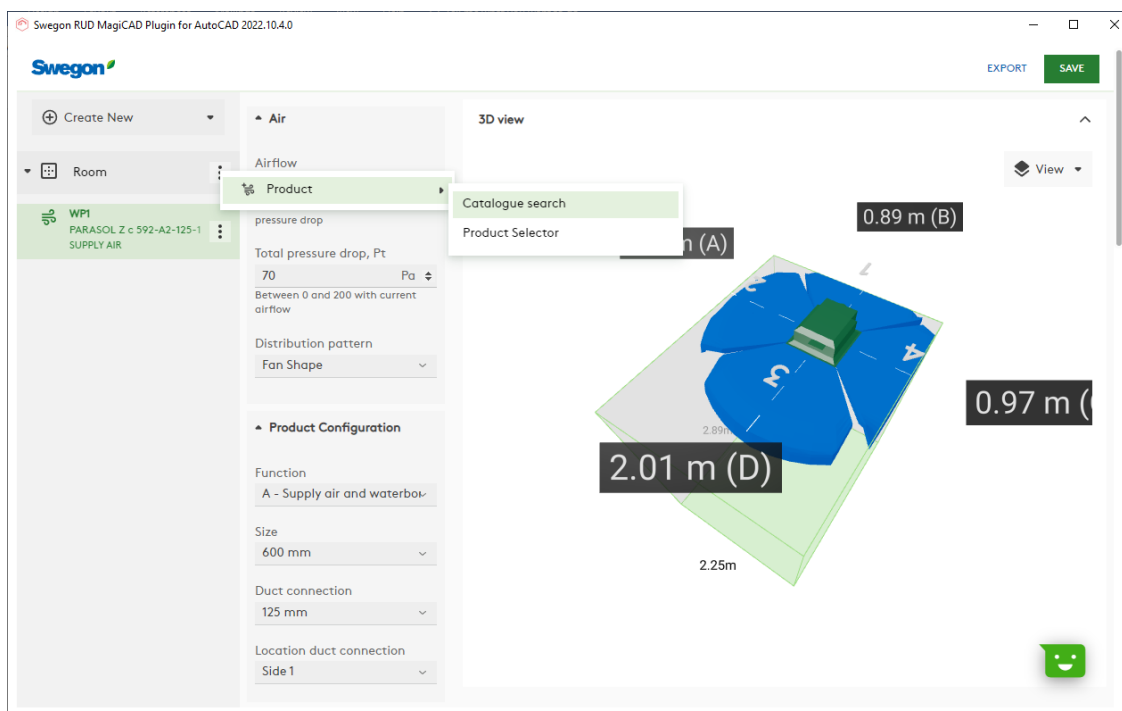


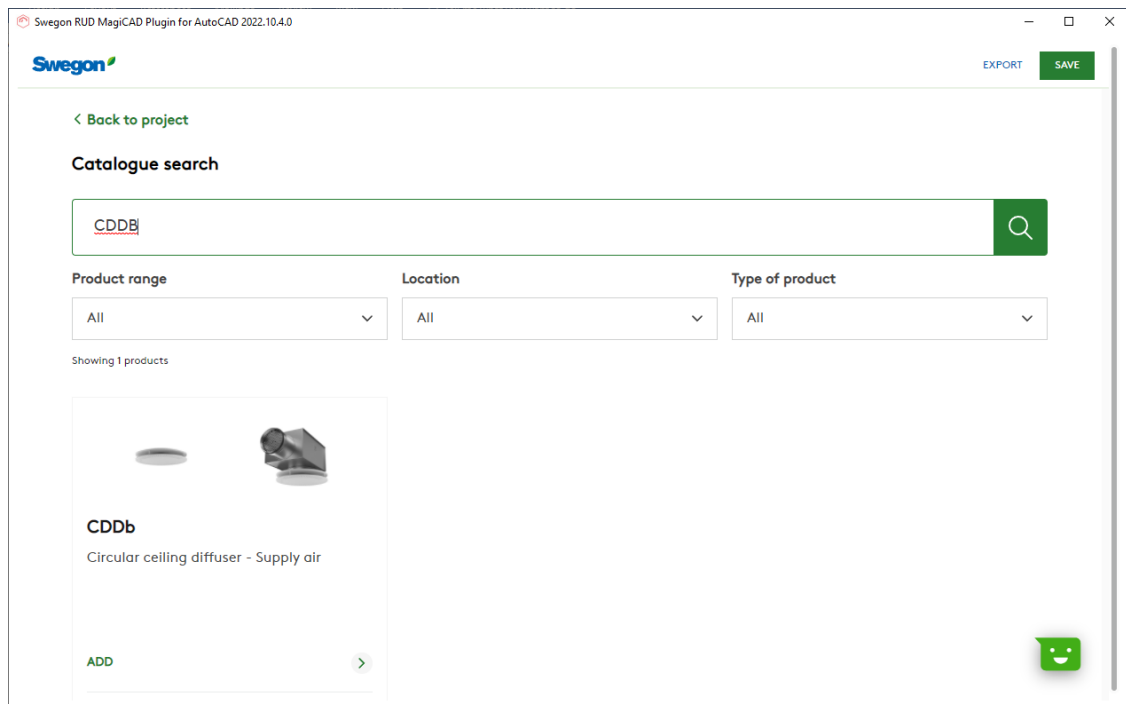
11. User can now add more products to the room as well if needed. In this example case we'll switch the existing product to a smaller size and add one more product to the room:

Switching the size of the product:

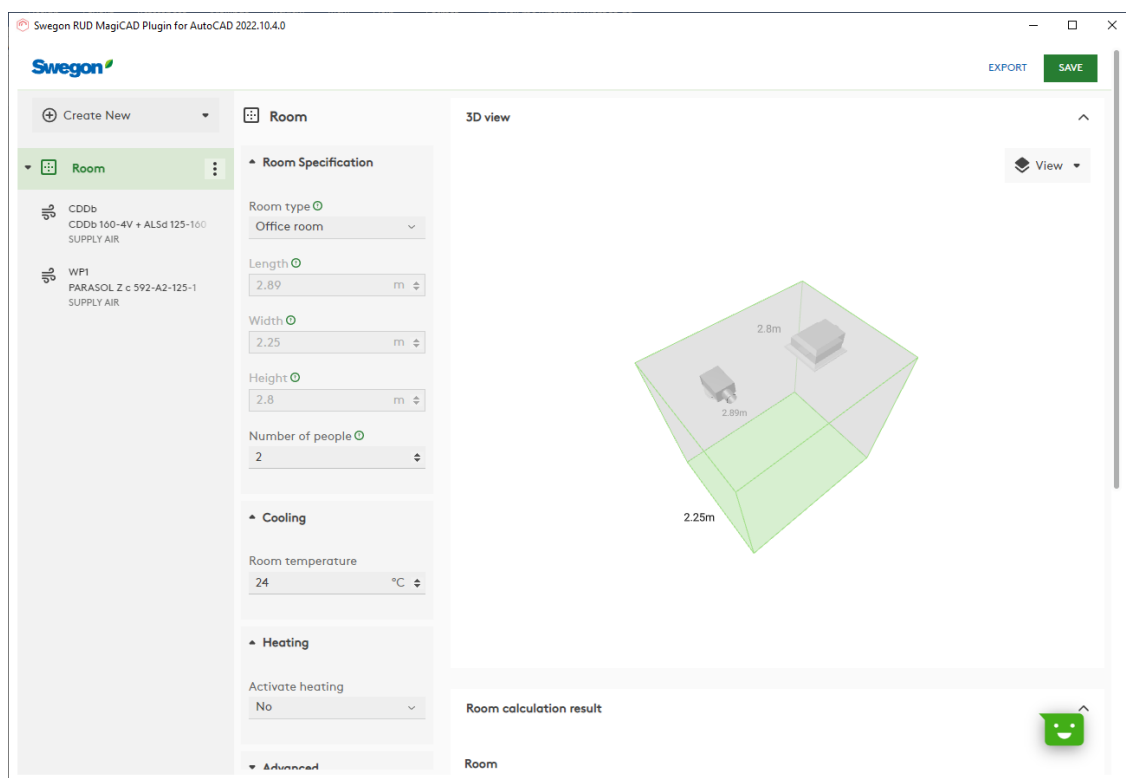


Adding new product from the catalog:



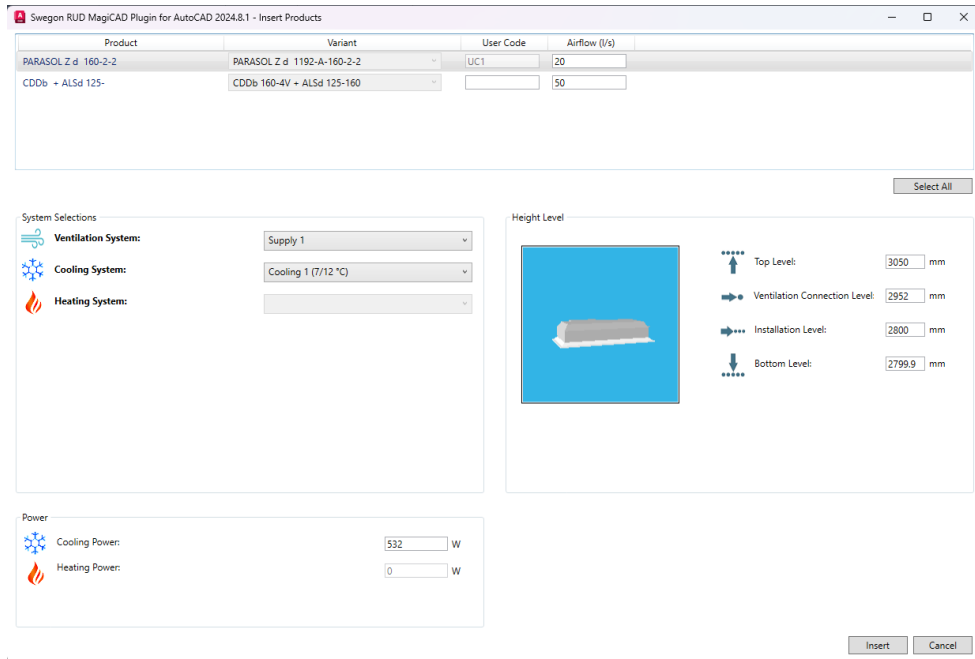


New product placed to the room (isolevel set to off -mode).



Once user has finished modified the room he/she clicks the “save” -button in order to send the modifications back to MagiCAD.

12. Insert products view is opened by the plugin:



Product	Variant	User Code	Airflow (l/s)
PARASOL Z d 160-2-2	PARASOL Z d 1192-A-160-2-2	UC1	20
CDDb + ALSd 125-	CDDb 160-4V + ALSd 125-160		50

**System Selections**

- Ventilation System: Supply 1
- Cooling System: Cooling 1 (7/12 °C)
- Heating System:

**Height Level**

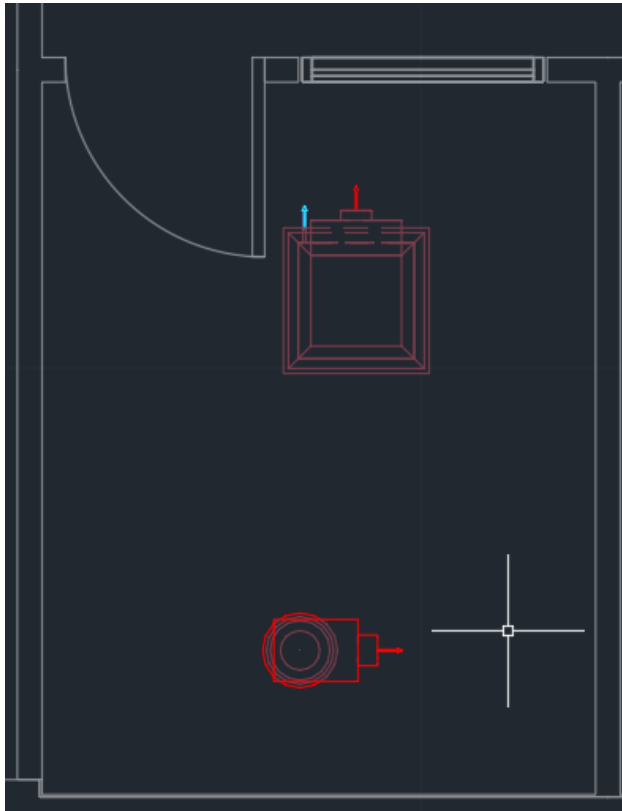
- Top Level: 3050 mm
- Ventilation Connection Level: 2952 mm
- Installation Level: 2800 mm
- Bottom Level: 2799.9 mm

**Power**

- Cooling Power: 532 W
- Heating Power: 0 W

**Buttons:** Select All, Insert, Cancel

Both products are listed to be inserted. Existing PARASOL Z in the drawing will be replaced with the smaller size and new CDDb will be added to the room to position specified in RUD:

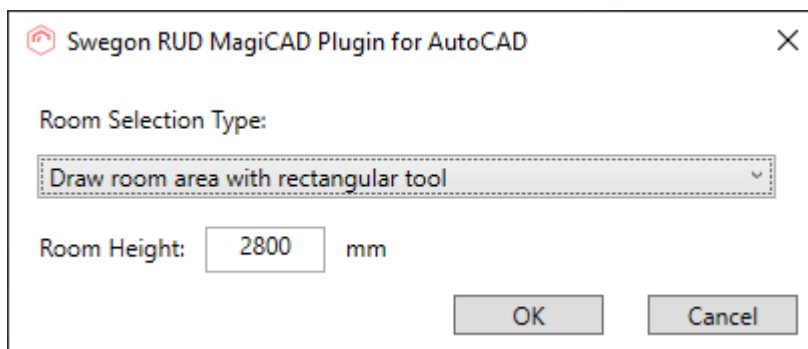


### 3.5 View Isolevel

View Isolevel command allows user to select the room area from MagiCAD drawing and view the isolevel in that room in RUD.

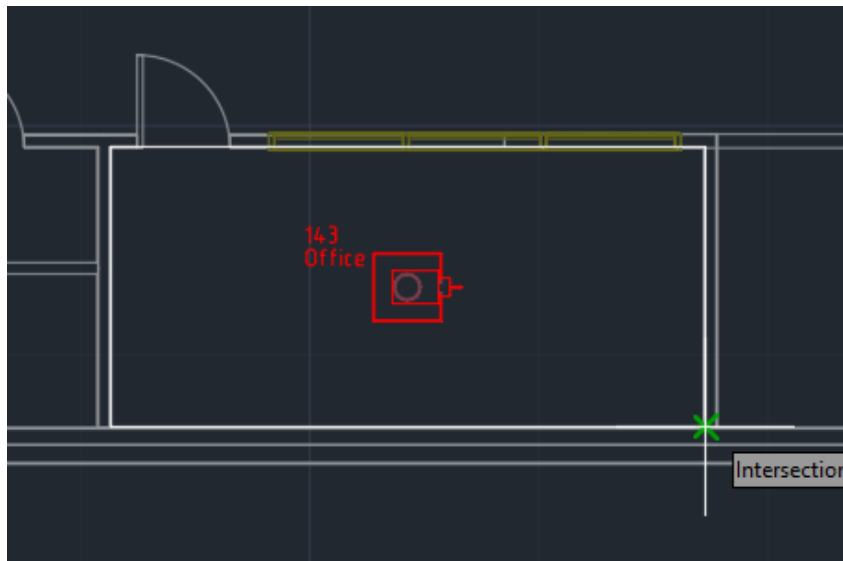
Follow these steps to use the View Isolevel -command:

1. Click View Isolevel -command from the plugin ribbon panel.
2. Following view is opened:

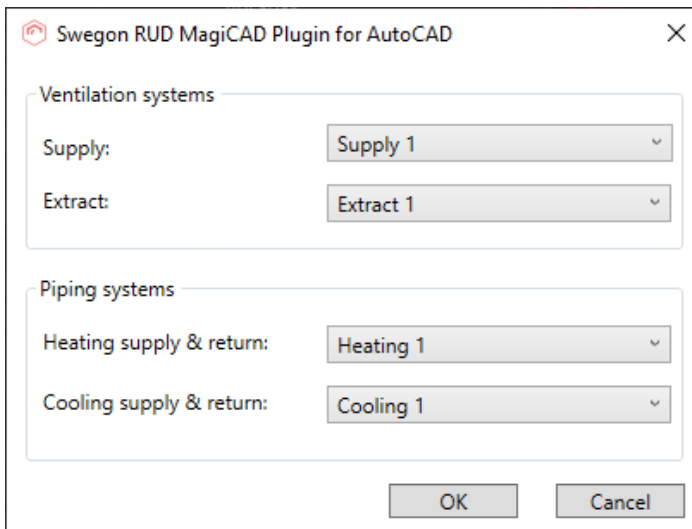


From the view user can choose how to select the room area from the drawing. User can also set height of the room from this view. The default room height is always the floor height in MagiCAD project settings.

3. Once OK-button is clicked, user is asked to select the room area:

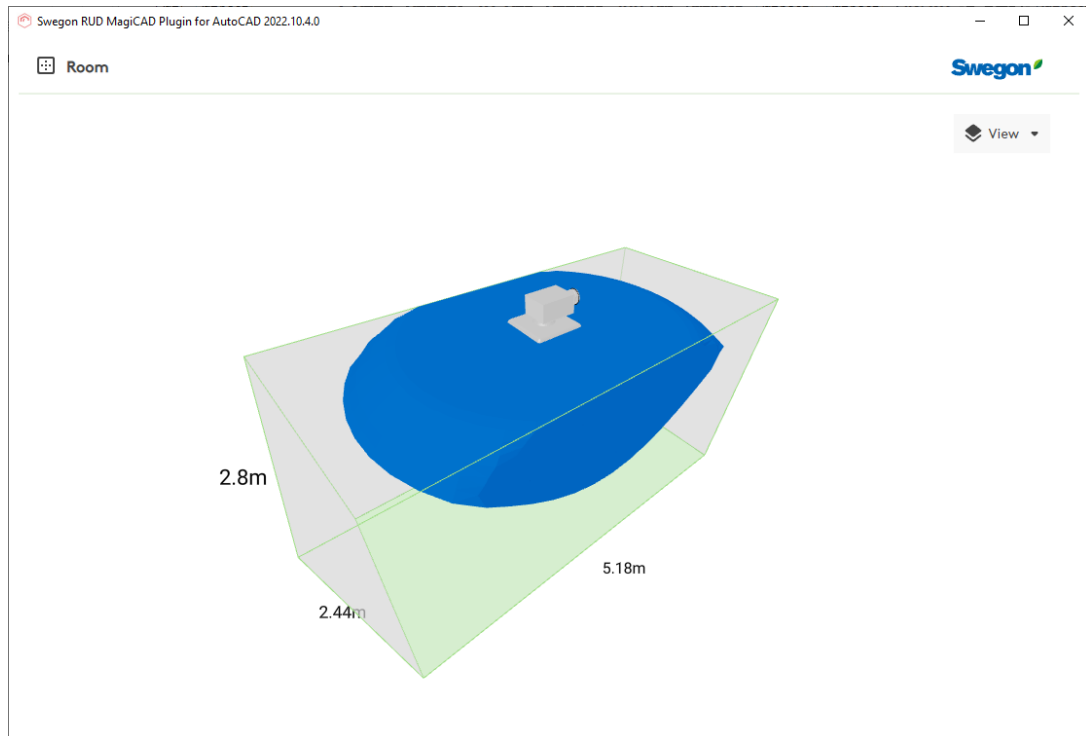


4. Next user is asked to make system selections used in the room:



If there were already Swegon products in the room, the system selections will be inherited from the products.

5. Swegon RUD is opened allowing user to view the isolevel. Notice that this command is view only. Open Room command should be used for making modifications.

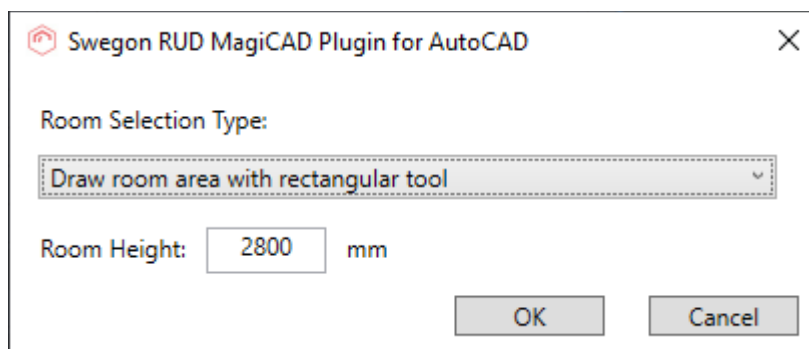


### 3.6 Room Calculation

Room Calculation -command allows user to select the room area from MagiCAD drawing and view the calculation results in RUD.

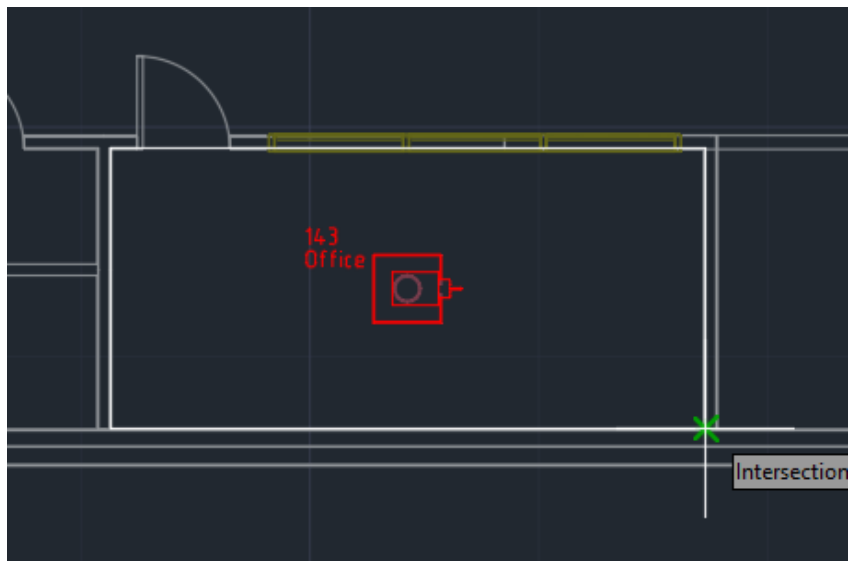
Follow these steps to use the Room Calculation -command:

1. Click Room Calculation -command from the plugin ribbon panel.
2. Following view is opened:

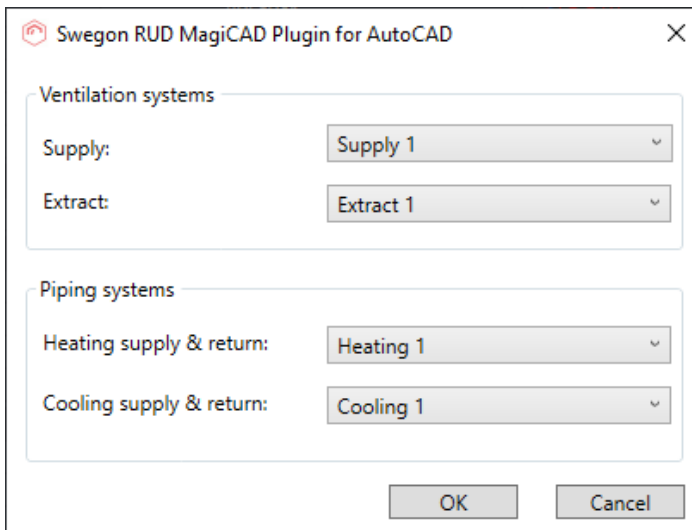


From the view user can choose how to select the room area from the drawing. User can also set height of the room from this view. The default room height is always the floor height in MagiCAD project settings.

3. Once OK-button is clicked, user is asked to select the room area:



6. Next user is asked to make system selections used in the room:



If there were already Swegon products in the room, the system selections will be inherited from the products.

7. Swegon RUD is opened allowing user to view the room calculation results:



Swegon RUD MagiCAD Plugin for AutoCAD 2022.10.4.0

**Room**

**Input**

Room type	Office room
Room size	2.5 X 5.2 x 2.8 m
Number of people	2
Room temperature cooling	24.0 °C
Room temperature heating	22.0 °C

**Room**

Area, floor	12.72 m²
Volume	35.60 m³
Sound level room, Lp	30 dB
Airflow/area	5.1 l/s/m²
CO2 value	554 ppm
CO2 emission	36 l/h
Room attenuation	5 dB
Air turnover rate	6.6 /h
Equivalent sound absorption area	10.23 m²
Total supply airflow	65.0 l/s

**Cooling/heating**

Capacity, air	468	--	W
Capacity, water	0	--	W

### 3.7 About

About command shows the version number of the RUD / plugin:

