



Climecon Vent.X

MagiCAD plugin for Revit – User guide

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Content

| | | |
|----------|---|----------|
| 1 | GENERAL | 3 |
| | About this document..... | 3 |
| | Installing the software..... | 3 |
| | Required third-party software..... | 3 |
| | Before installation..... | 3 |
| | Installation..... | 3 |
| | Starting the program..... | 4 |
| 2 | FUNCTIONS | 5 |
| | Climecon Vent.X MagiCAD plugin UI overview..... | 5 |
| | Insert operation..... | 5 |
| | Detailed insert operation in Revit..... | 6 |
| | Detailed insert operation in MagiCAD for Revit..... | 10 |

1 General

About this document

This document contains instructions on using Climecon Vent.X MagiCAD plugin on Autodesk Revit.

Climecon Vent.X MagiCAD plugin allows user to insert and use Vent.X family air diffusers in MagiCAD project and drawing. Inserting of products is also possible without MagiCAD in Revit only.

Installing the software

Required third-party software

Climecon Vent.X MagiCAD plugin works with the following MagiCAD and Revit versions:

- MagiCAD for Revit 2018 and 2019
- Revit 2017, 2018 and 2019

Before installation

Workstation administrator privileges are recommended for installation.

Installation

1. Download the installer file Climecon MagiCAD Plugin for Revit from MagiCAD portal to your workstation:

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

2. Run the Climecon MagiCAD Plugin for Revit installer on your workstation.

Starting the program

The plugin is automatically loaded and is ready to be used once MagiCAD is started next time after the plugin is installed.

Before you start using the Climecon Vent.X MagiCAD plugin, (re)start the MagiCAD and open a ventilation project.

Locate the Add-Ins tab from the Revit ribbon panel. Once the Climecon Vent.X MagiCAD plugin is loaded its ribbon panel and button can be found Revit Add-Ins tab. When the button is clicked the Vent.X device insert operation is started. On mouse over the button it gives some extra information about the functionality.



Figure 1 Revit Add-Ins tab with Vent.X insert button

2 Functions

Climecon Vent.X MagiCAD plugin UI overview

Vent.X plugin contains one operation:

Insert operation



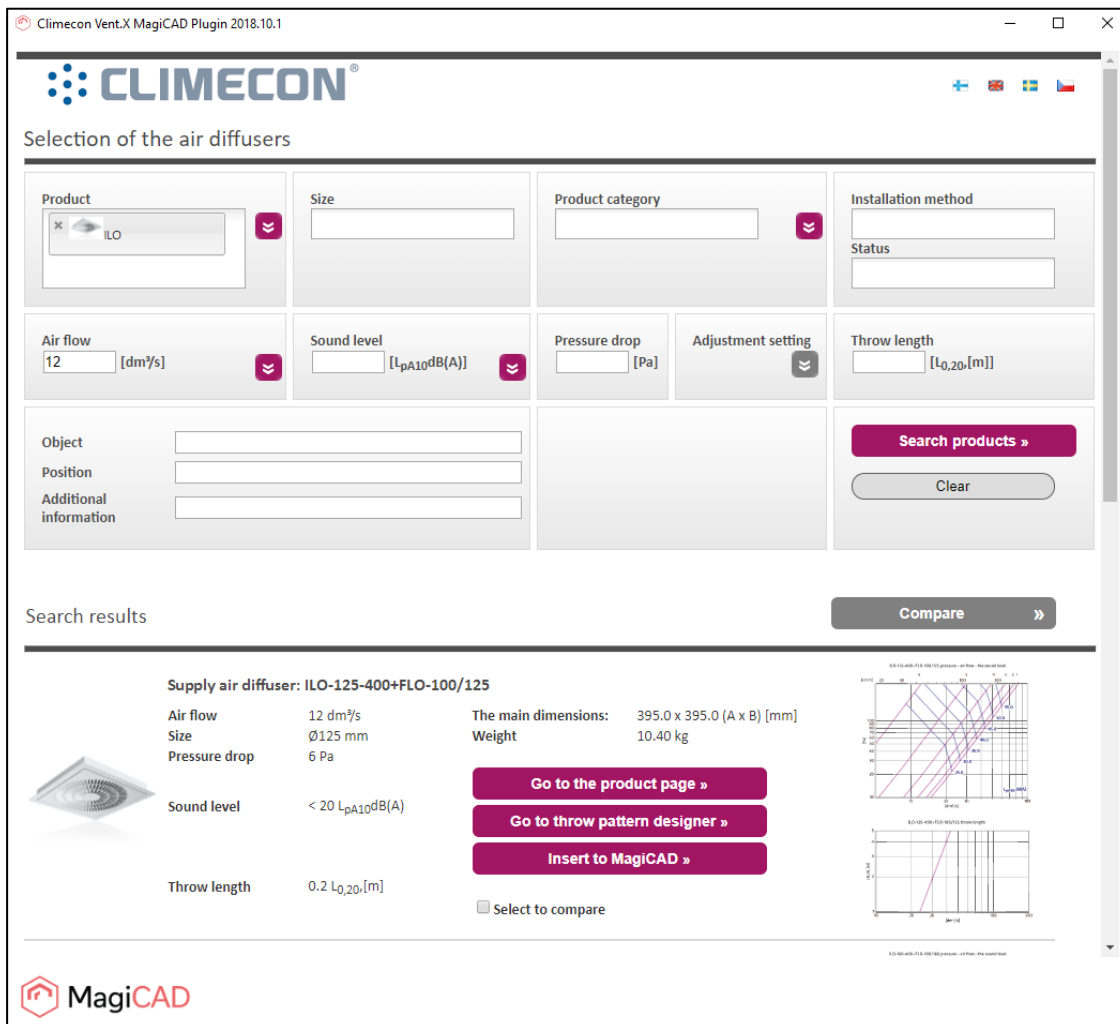
This command inserts a new Vent.X air diffuser device to MagiCAD with Climecon Vent.X selection tool.

Detailed insert operation in Revit



Follow these steps to insert Vent.X air diffuser device to Revit:


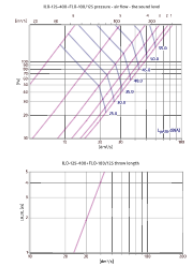
1. Click the “Insert Vent.X device” button from the Add-Ins tab.
2. Once the operation is started the plugin opens the Vent.X selection tool. User selects the product, limits the search criteria and selects the “Search products” button to proceed.



The screenshot shows the Climecon Vent.X MagiCAD Plugin 2018.10.1 interface. The main window is titled "Selection of the air diffusers". It features a search form with the following fields and values:

- Product:** ILO
- Size:** (empty)
- Product category:** (empty)
- Installation method:** (empty)
- Status:** (empty)
- Air flow:** 12 [dm³/s]
- Sound level:** (empty) [L_{pA10}dB(A)]
- Pressure drop:** (empty) [Pa]
- Adjustment setting:** (empty)
- Throw length:** (empty) [L_{0,20}[m]]
- Object:** (empty)
- Position:** (empty)
- Additional information:** (empty)

Buttons include "Search products »" and "Clear". Below the search form is a "Search results" section with a "Compare »" button. The search results for "Supply air diffuser: ILO-125-400+FLO-100/125" are displayed:

| | | | |
|---|--|---|---|
|  | Supply air diffuser: ILO-125-400+FLO-100/125 Air flow: 12 dm ³ /s Size: Ø125 mm Pressure drop: 6 Pa Sound level: < 20 L _{pA10} dB(A) Throw length: 0.2 L _{0,20} [m] | The main dimensions: 395.0 x 395.0 (A x B) [mm] Weight: 10.40 kg |  |
|---|--|---|---|

Buttons for the search results include "Go to the product page »", "Go to throw pattern designer »", "Insert to MagiCAD »", and "Select to compare".

Figure 2 Climecon Vent.X air diffuser device selection tool

- After user has searched for the products the selection tool opens a list of search results. User selects a product and starts to insert it to MagiCAD project by selecting the “Insert to MagiCAD” button.

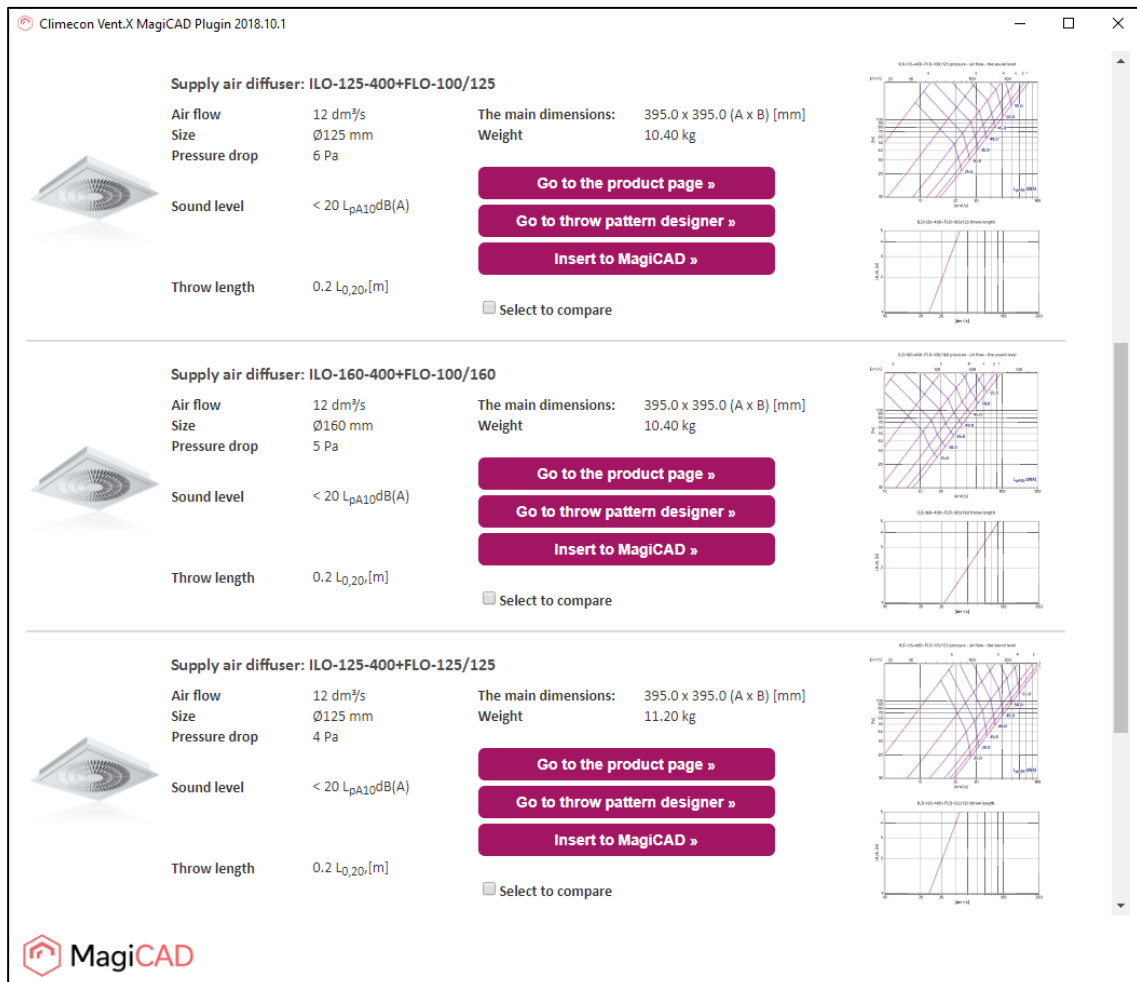


Figure 3 Selecting product from Vent.X

- After this plugin opens an insert dialog where user inserts the offset and the air flow value for the product. Air flow value here is the same value which user has added in the search criteria in Vent.X. User should take care that air flow value is suitable for the product. User proceeds to device installation with enter or OK button.

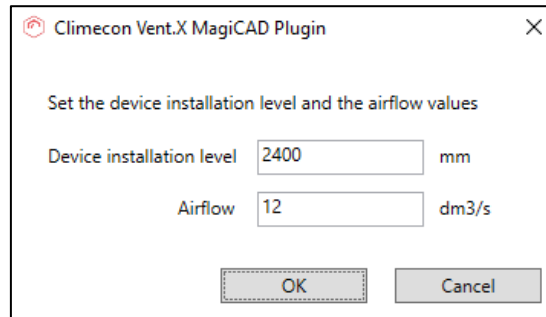


Figure 4 Vent.X product insert dialog

- After this user inserts the air diffuser device in to the drawing.

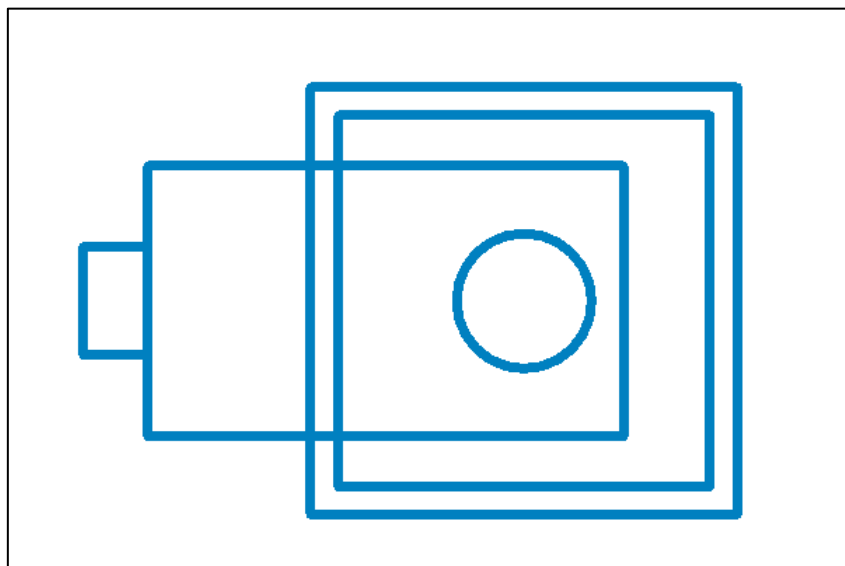


Figure 5 Vent.X air diffuser device placed to Revit project

6. Finally air diffuser device is inserted and is ready to be used in the MagiCAD project.

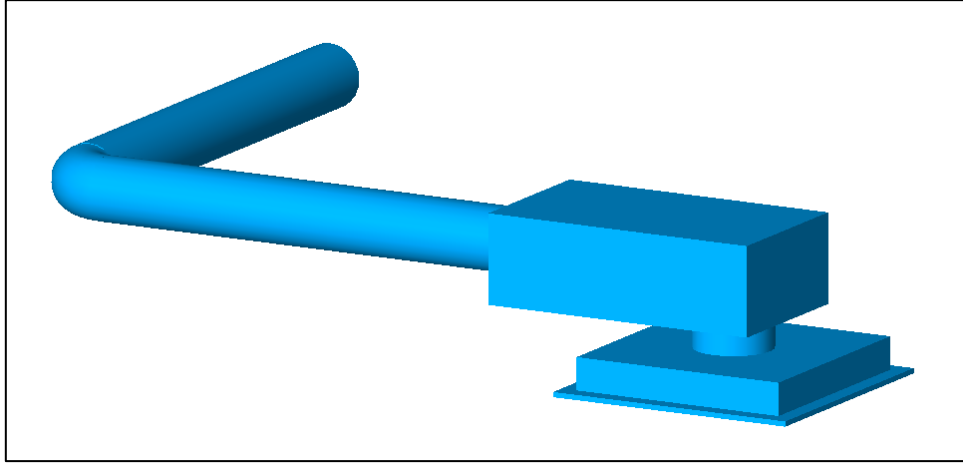
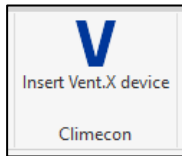


Figure 6 Vent.X air diffuser ILO+FLO in MagiCAD project with duct connection

Detailed insert operation in MagiCAD for Revit



Follow these steps to insert Vent.X air diffuser device to MagiCAD for Revit:

1. Click the “Insert Vent.X device” button from the Add-Ins tab.
2. Once the operation is started the plugin opens the Vent.X selection tool. User selects the product, limits the search criteria and selects the “Search products” button to proceed.



The screenshot displays the Climecon Vent.X MagiCAD Plugin 2018.10.1 interface. The main window is titled "Selection of the air diffusers" and contains several input fields for filtering products:

- Product:** A dropdown menu showing "ROK".
- Size:** An empty text input field.
- Product category:** An empty text input field.
- Installation method:** An empty text input field.
- Status:** An empty text input field.
- Air flow:** A numeric input field set to "10" [dm³/s].
- Sound level:** A numeric input field [L_{pA10}dB(A)].
- Pressure drop:** A numeric input field [Pa].
- Adjustment setting:** A dropdown menu.
- Throw length:** A numeric input field [L_{0,20}[m]].
- Object, Position, Additional information:** Three empty text input fields.

At the bottom right of the selection tool, there is a "Search products »" button and a "Clear" button. Below the selection tool, the "Search results" section shows a "Compare »" button. The search results for "Tuloilmahajottaja: ROK-100+FLO-100/100" are displayed:

| | | | |
|---|---|--|---|
|  | Tuloilmahajottaja: ROK-100+FLO-100/100 Air flow: 10 dm³/s Size: Ø100 mm Pressure drop: 5 Pa Sound level: < 20 L _{pA10} dB(A) Throw length: 0.5 L _{0,20} [m] | The main dimensions: 294.0 x 294.0 (A x B) [mm] Weight: 5.50 kg |  |
|---|---|--|---|

Below the product details, there are three buttons: "Go to the product page »", "Go to throw pattern designer »", and "Insert to MagiCAD »". A "Select to compare" checkbox is also present.

Figure 7 Climecon Vent.X air diffuser device selection tool

- After user has searched for the products the selection tool opens a list of search results. User selects a product and starts to insert it to MagiCAD project by selecting the "Insert to MagiCAD" button.

The screenshot displays the Climecon Vent.X MagiCAD Plugin interface with three product selection cards. Each card includes a product image, technical specifications, and action buttons.

| Product Model | Air flow | Size | Pressure drop | Sound level | Throw length | Main dimensions (A x B) [mm] | Weight |
|--|-----------------------|---------|---------------|------------------------------|---------------------------|------------------------------|---------|
| Tuloilmahajottaja: ROK-100+FLO-100/100 | 10 dm ³ /s | Ø100 mm | 5 Pa | < 20 L _{pA10} dB(A) | 0.5 L _{0,20} [m] | 294.0 x 294.0 | 5.50 kg |
| Tuloilmahajottaja: ROK-125+FLO-100/125 | 10 dm ³ /s | Ø125 mm | 3 Pa | < 20 L _{pA10} dB(A) | 0.5 L _{0,20} [m] | 294.0 x 294.0 | 5.50 kg |
| Tuloilmahajottaja: ROK-125+FLO-125/125 | 10 dm ³ /s | Ø125 mm | 2 Pa | < 20 L _{pA10} dB(A) | 0.5 L _{0,20} [m] | 294.0 x 294.0 | 6.30 kg |

Each card also features three buttons: "Go to the product page »", "Go to throw pattern designer »", and "Insert to MagiCAD »", along with a "Select to compare" checkbox. Technical charts are visible on the right side of the interface.

Figure 8 Selecting product from Vent.X

- After this plugin opens a MagiCAD Dataset Properties dialog. User inserts a user code, 2D symbol for product and checks that the Device installation level is correct. User continues with the OK button.

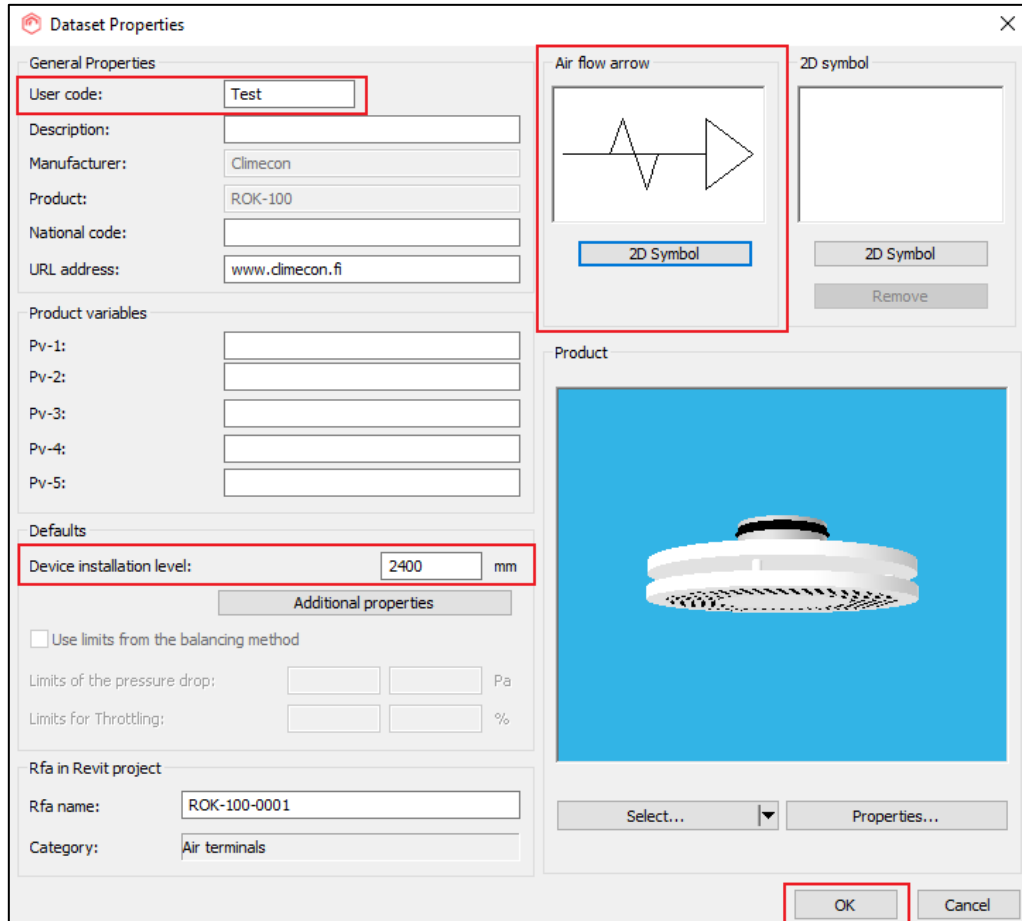


Figure 9 MagiCAD dataset properties dialog

- After this the installation of the product is started and the Product Selection dialog is opened. The product added to dataset is preselected from the product list. User proceeds to device airflow selection from Diagram tab.

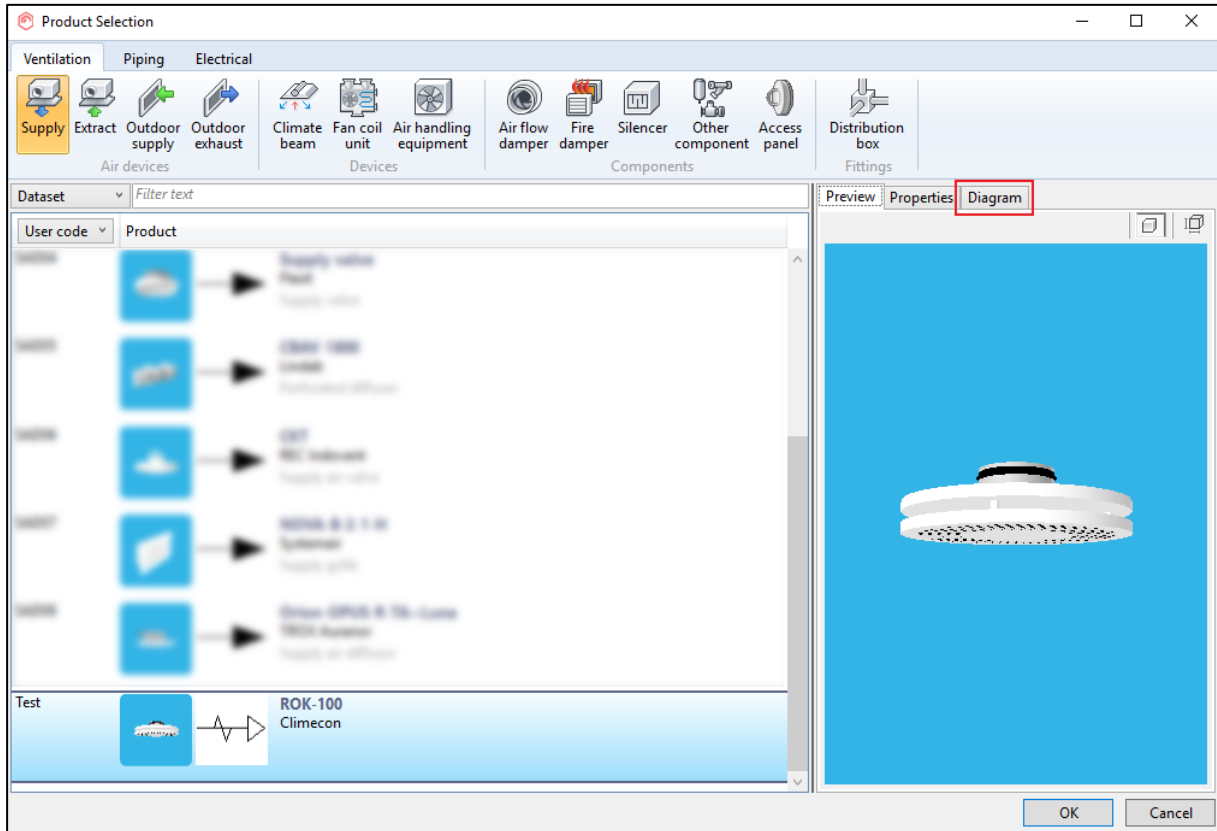


Figure 10 MagiCAD Product Selection dialog

- User selects the device airflow from the Diagram tab by writing the value to the Flow field or by selecting the point from the graph line. Proceed to device installation by selecting OK from the dialog.

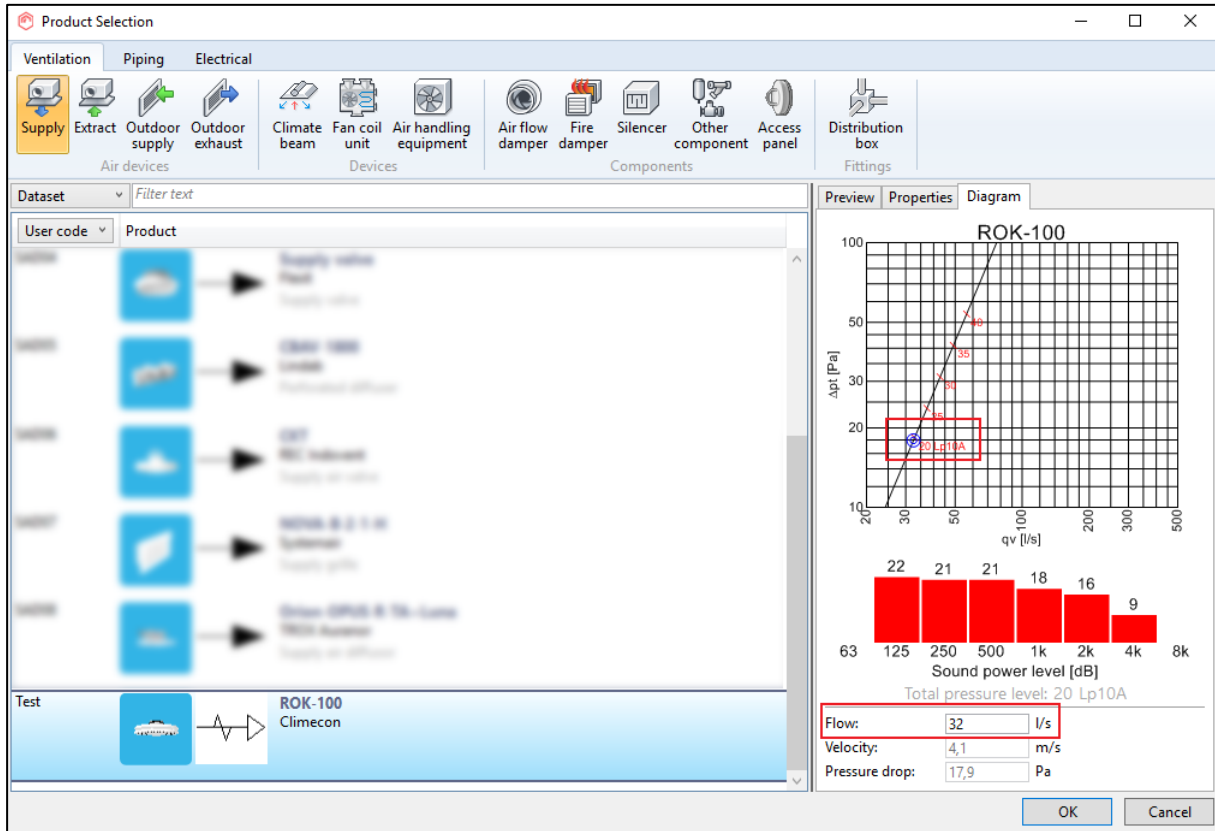


Figure 11 Product Selection dialog and setting the flow value

- After this user inserts the air diffuser device in to the drawing.

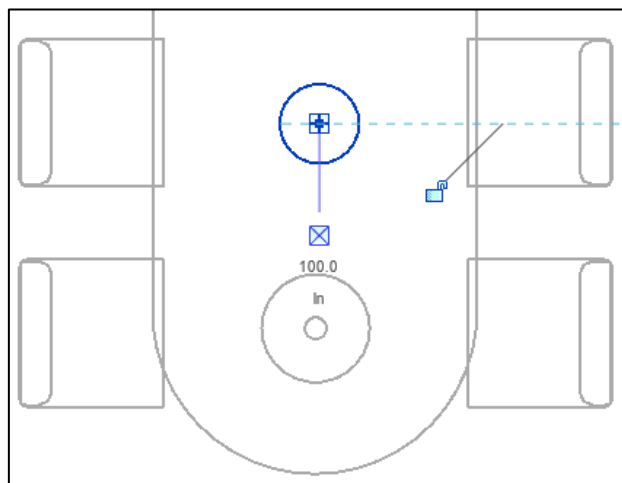


Figure 12 Vent.X air diffuser device placed to MagiCAD project

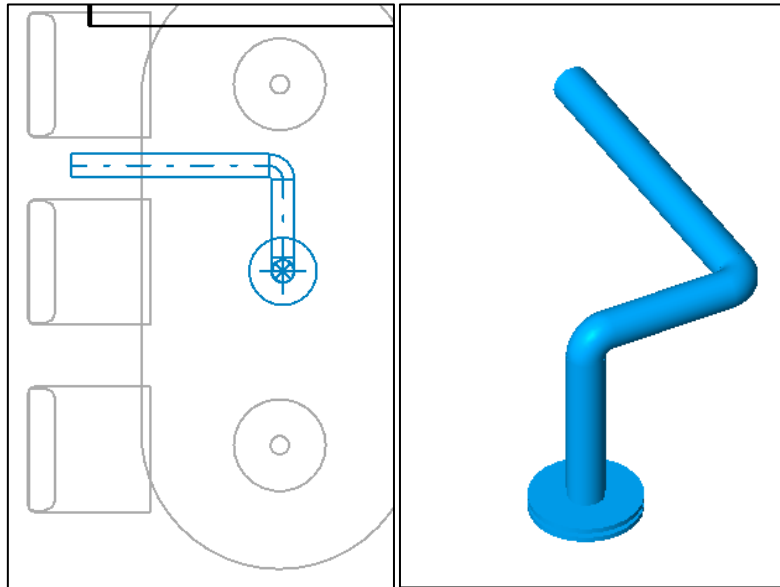


Figure 13 Vent.X air diffuser ROK-100 in MagiCAD project with duct connection