Bevent Rasch

MagiCAD plugin for AutoCAD – User guide

26/05/2023

MagiCAD

Content

1 GENERAL 3
1.1 About this document 3
1.2 Installing the software 3
1.2.1 Required third-party software 3
1.2.2 Before installation 3
Installation 3
1.3 Starting the program 4
2 FUNCTIONS 4
2.1 Insert roof cowl operation 4
2.1.1 Detailed insert operation in MagiCAD for AutoCAD 4
2.1.2 Combination cowls 10
2.2 Insert silencer operation 11
2.2.1 Detailed insert operation in MagiCAD for AutoCAD 12

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1 General

1.1 About this document

This document contains instructions on using Bevent-Rasch MagiCAD for AutoCAD plugin. Bevent-Rasch MagiCAD plugin integrates Dimensio calculation tool into MagiCAD allowing users to insert roof cowls, roof inlets and silencers into MagiCAD project and drawing. Plugin enables also proper support for handling the combination roof cowls and roof inlets.

1.2 Installing the software

1.2.1 Required third-party software

Bevent-Rasch MagiCAD plugin works with the following MagiCAD and AutoCAD versions:

- MagiCAD 2023 and AutoCAD 2019-2023
- MagiCAD 2024 and AutoCAD 2021-2024

1.2.2 Before installation

1. Workstation administrator privileges are recommended for installation.

2. Notice if you have several AutoCAD versions on your workstation. Before you run the plugin installer, start MagiCAD to make sure that the plugin installs on the same AutoCAD platform as MagiCAD. When using MagiCAD plugin manager, the plugin is installed on the currently active AutoCAD version.

Installation

1. Use MagiCAD plugin manager to install the plugin or download the plugin installer from MagiCAD portal:

   https://portal.magicad.com/Download/ProductSearch?searchStr=Bevent-Rasch&categoryId=3

2. Run the installer on your workstation.

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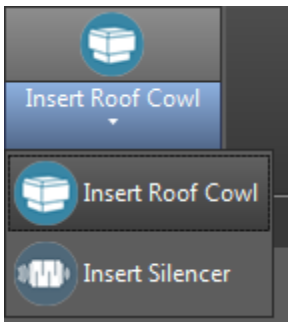
1.3 Starting the program

The plugin is automatically loaded and is ready to be used once MagiCAD is started next time after the plugin is installed. If you installed the plugin with plugin manager, the plugin is ready to be used without restarting the MagiCAD / AutoCAD.

Bevent-Rasch MagiCAD plugin ribbon panel can be found from MagiCAD plugins tab:



2 Functions

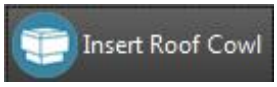
Bevent-Rasch plugin contains two operations:

- Insert Roof Cowl
- Insert Silencer

2.1 Insert Roof Cowl operation

This command opens Dimensio calculation tool for selecting available Bevent-Rasch roof cowls. User can choose which roof cowl to insert, and optionally include the roof inlet to be inserted along with the roof cowl.

2.1.1 Detailed insert operation in MagiCAD for AutoCAD



Follow these steps to insert roof cowl from Dimensio calculation tool to MagiCAD drawing:

1. Click the “Insert Roof Cowl” -button from the MagiCAD Plugins tab. Once the operation is started the plugin opens the Dimensio calculation tool.

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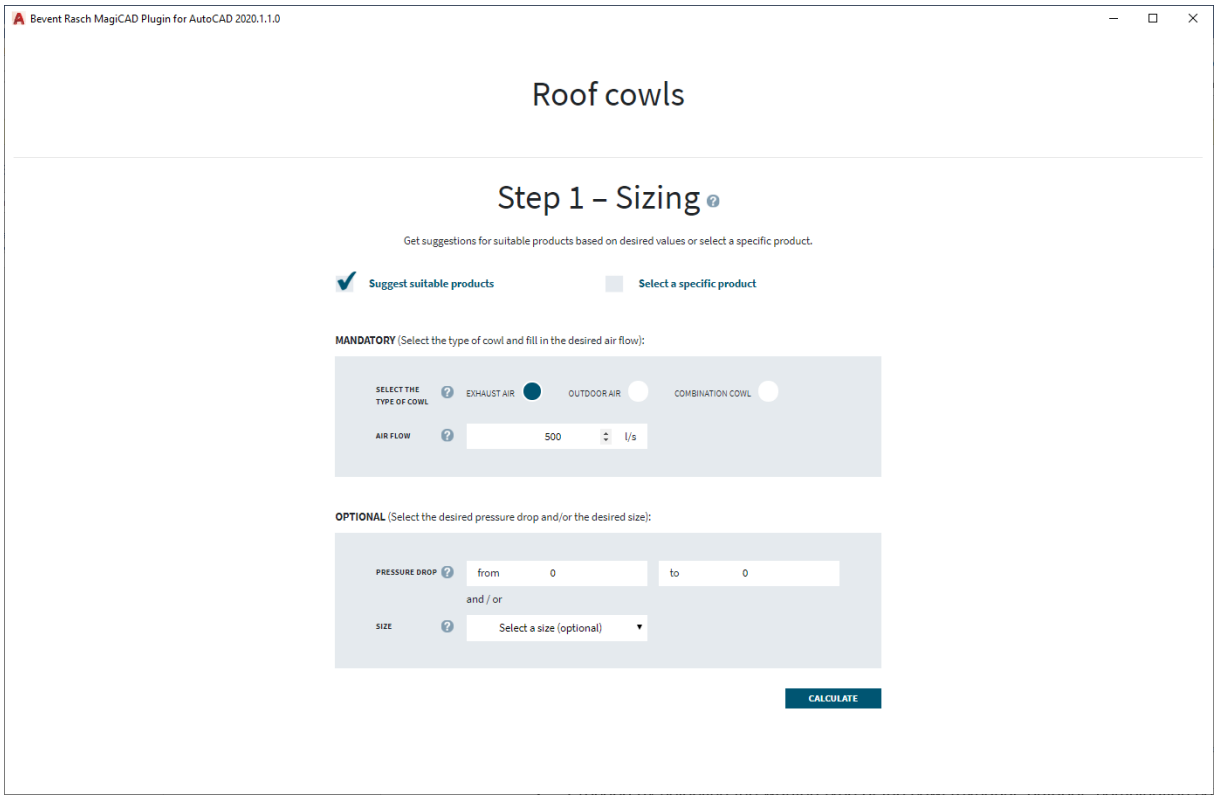

2. Proceed by selecting the wanted type of the cowl (exhaust, outdoor, combination cowl) and enter the required airflow and other wanted search parameters. Optionally you can choose to size a specific product, which allows you to directly choose from list of available products within the cowl type. After that click the calculate -button, and Dimensio will show list of suitable products:

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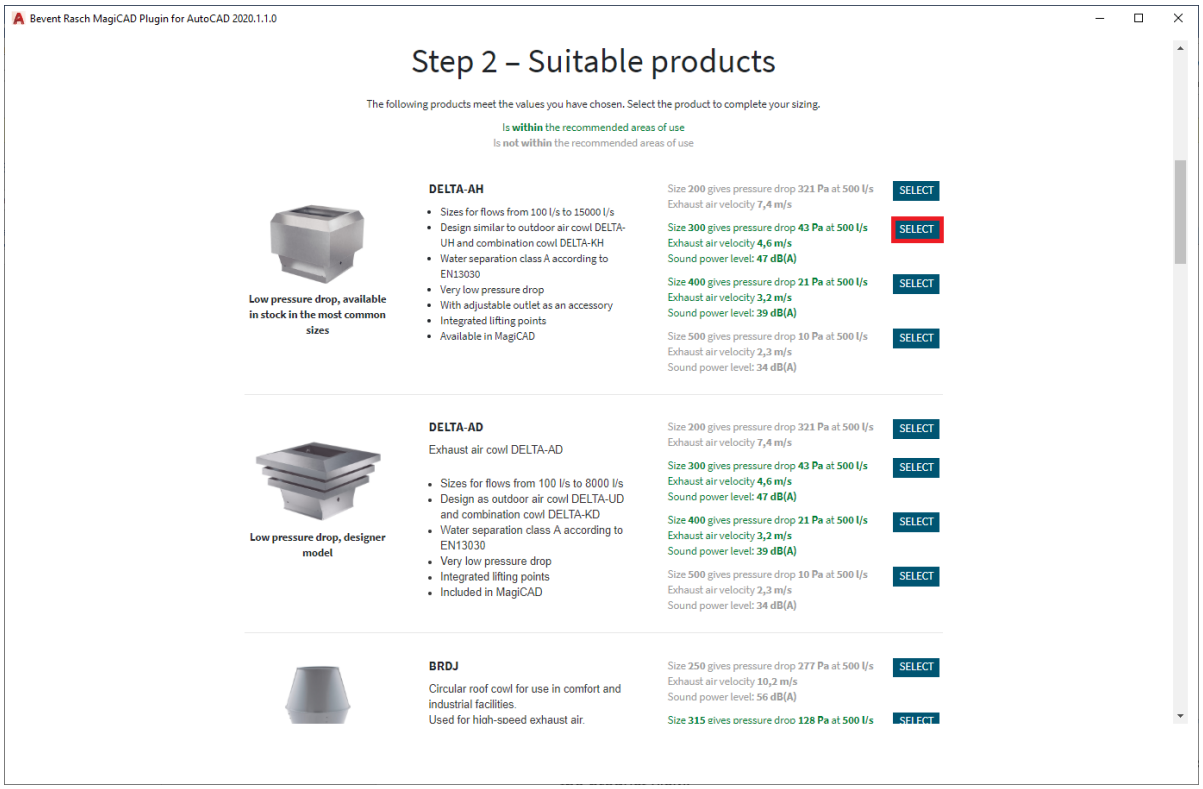
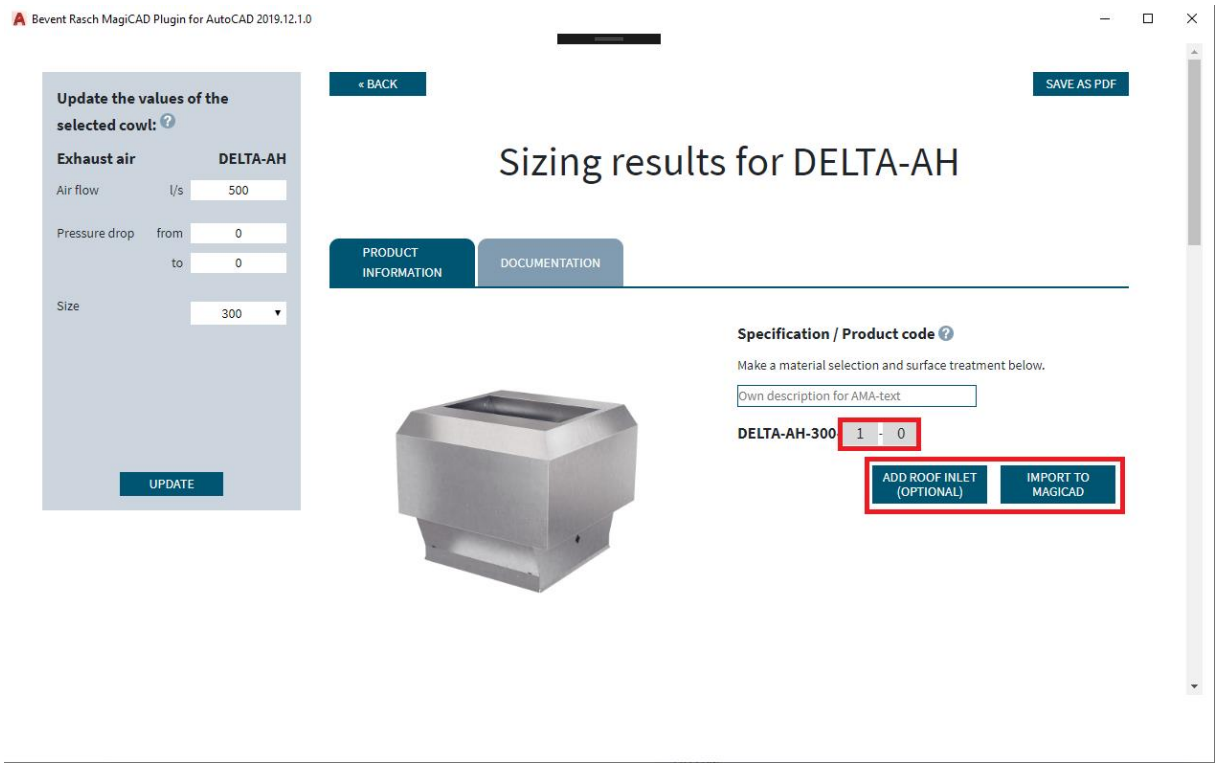


3. Proceed by choosing the wanted product variant and click the select -button. Dimensio loads the product view:



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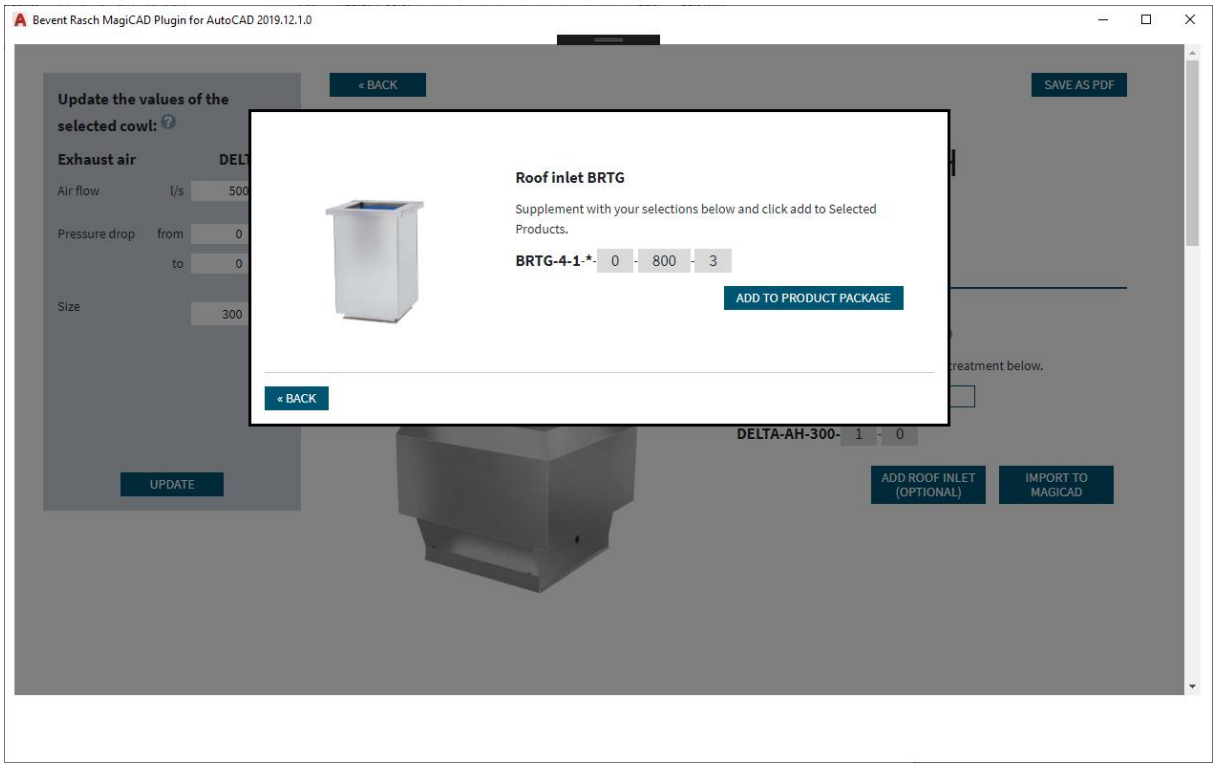
4. In product view, it's possible to still make the final selections to the product variant. Once the selection are made, you can proceed by clicking the Import to MagiCAD -button, which initiates the roof cowl insert operation to MagiCAD drawing. Optionally you can click Add roof inlet -button which allows you to insert also the roof inlet in addition to roof cowl. By clicking Add to product package users adds the roof inlet to list of products to be imported to MagiCAD and the roof inlet view is closed.



5. Import to MagiCAD -button starts the insert operation. Dimensio window is closed and Insert Roof Cowl view is displayed:

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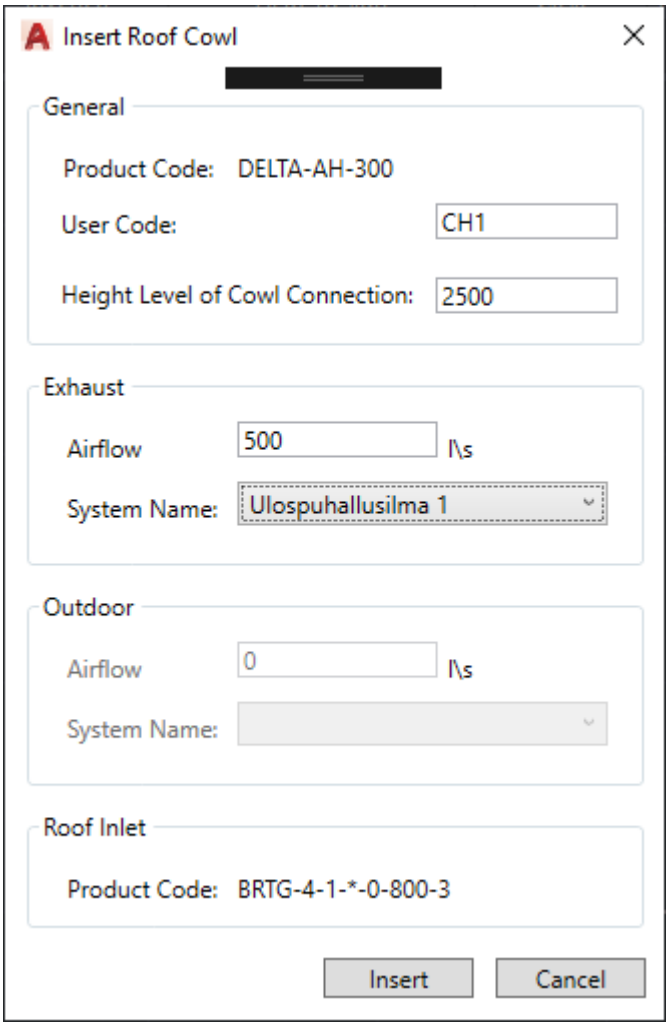

6. In insert Roof Cowl view following fields must be filled:

- **User code:** User code of the roof cowl is entered here.
- **Height Level of Cowl Connection:** Insertion point of the roof cowl. Roof inlet is installed automatically below the roof cowl and connected to it (there is duct of minimum length between cowl and roof inlet).
- **Exhaust airflow:** Airflow of the exhaust side is entered here. Disabled if the imported cowl is connected only to outdoor system. By default the field is filled with the search criteria value filled in Dimensio.
- **System Name:** Exhaust system for the roof cowl. Disabled if the imported cowl is connected only to outdoor system.
- **Outdoor airflow:** Airflow of the exhaust side is entered here. Disabled if the imported cowl is connected only to outdoor system. By default the field is filled with the search criteria value filled in Dimensio.
- **System Name:** Outdoor system for the roof cowl. Disabled if the imported cowl is connected only to exhaust system. For combination cowls both systems are enabled.
- **Roof inlet User Code:** User code for the roof inlet is entered here.

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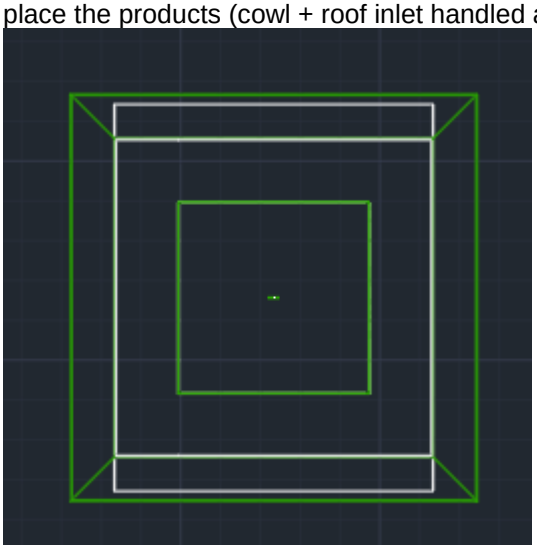
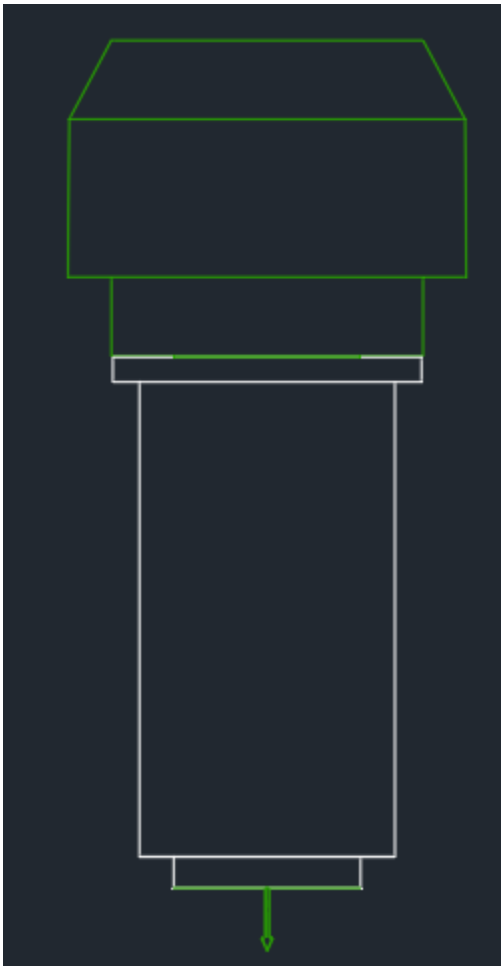
Once the required fields have been filled, proceed by clicking the insert button, which allows to place the products (cowl + roof inlet handled as one product package) to the drawing:





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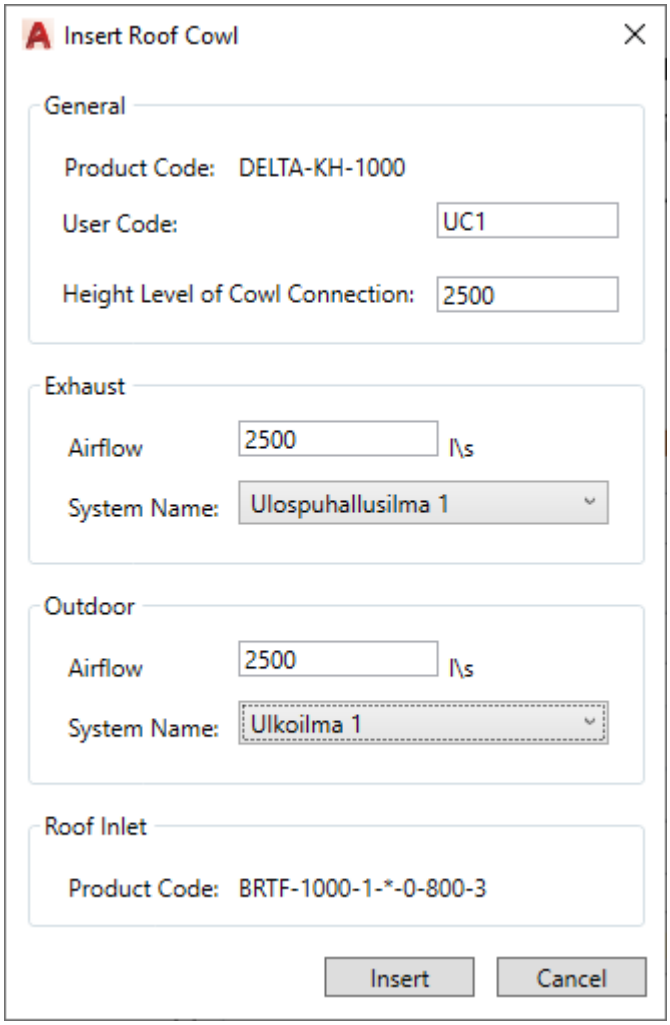
2.1.2 Combination cowls

The plugin also includes support for insertion of Bevent-Rach combination roof cowls. The workflow is similar to inserting of regular roof cowls, but in Insert Roof Cowl dialog user needs to provide the airflow and system selections for both system types.



Plugin creates additional connector to the outdoor system in case of combination cowl:

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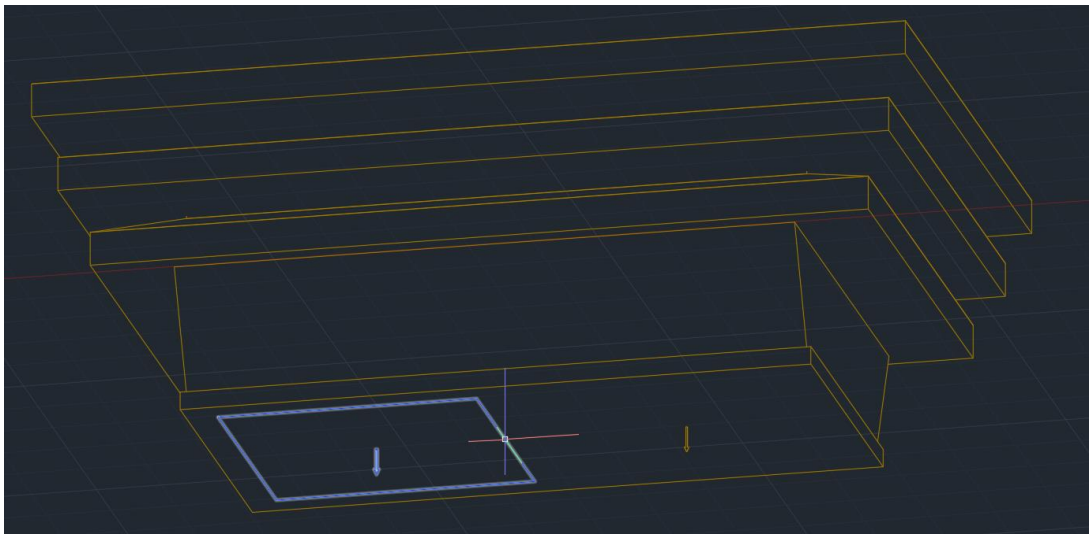
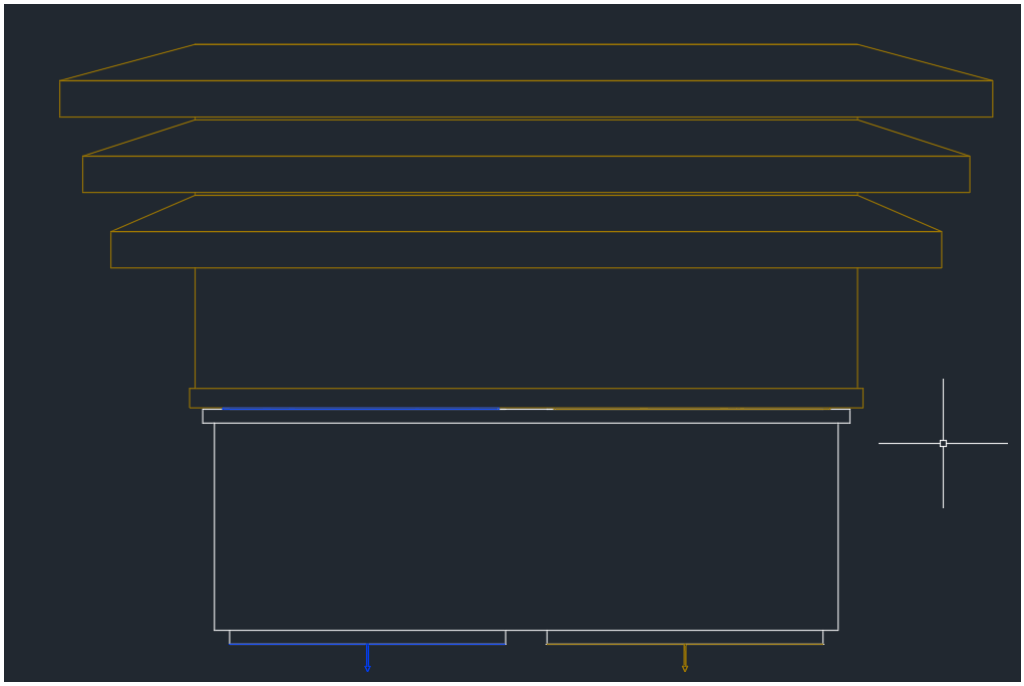


Also the roof inlet for combination cowl is supported:



2.2 Insert silencer operation

This command opens Dimensio calculation tool allowing user to search for suitable silencers and then insert the selected silencer into MagiCAD project.

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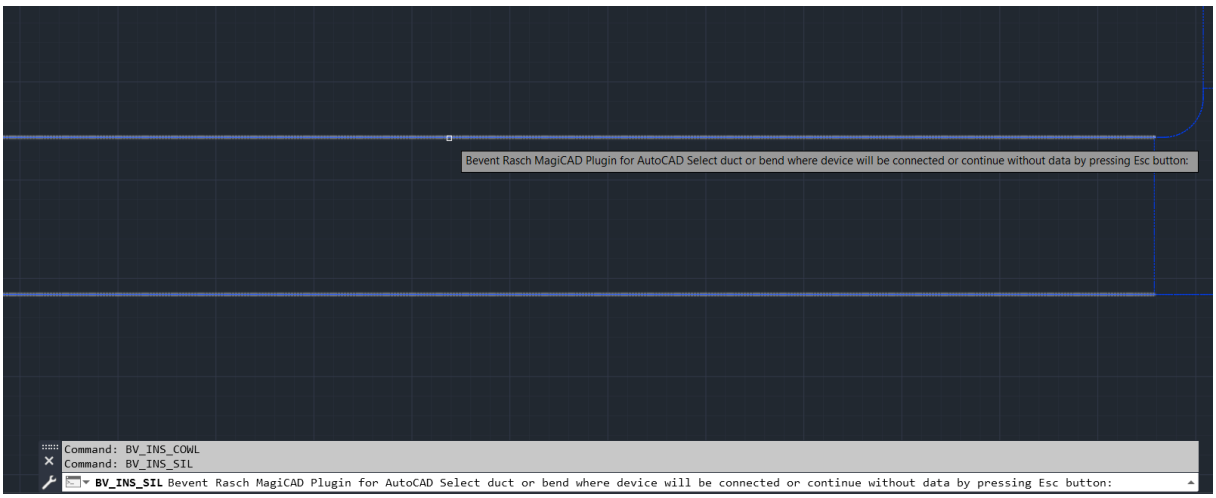
2.2.1 Detailed insert operation in MagiCAD for AutoCAD

Follow these steps to insert Bevent-Rasch silencer into MagiCAD drawing:

1. Click the “Insert Silencer” -button from Bevent-Rasch ribbon panel located in the MagiCAD Plugins tab.
2. Plugin asks you to selected the duct where to connect the silencer to (this step can be skipped by pressing esc -button):



3. Once the duct has been selected, plugin opens the Dimensio selection tool for silencer search. Notice that most of search criteria fields have been automatically filled with the parameters read from the selected duct:

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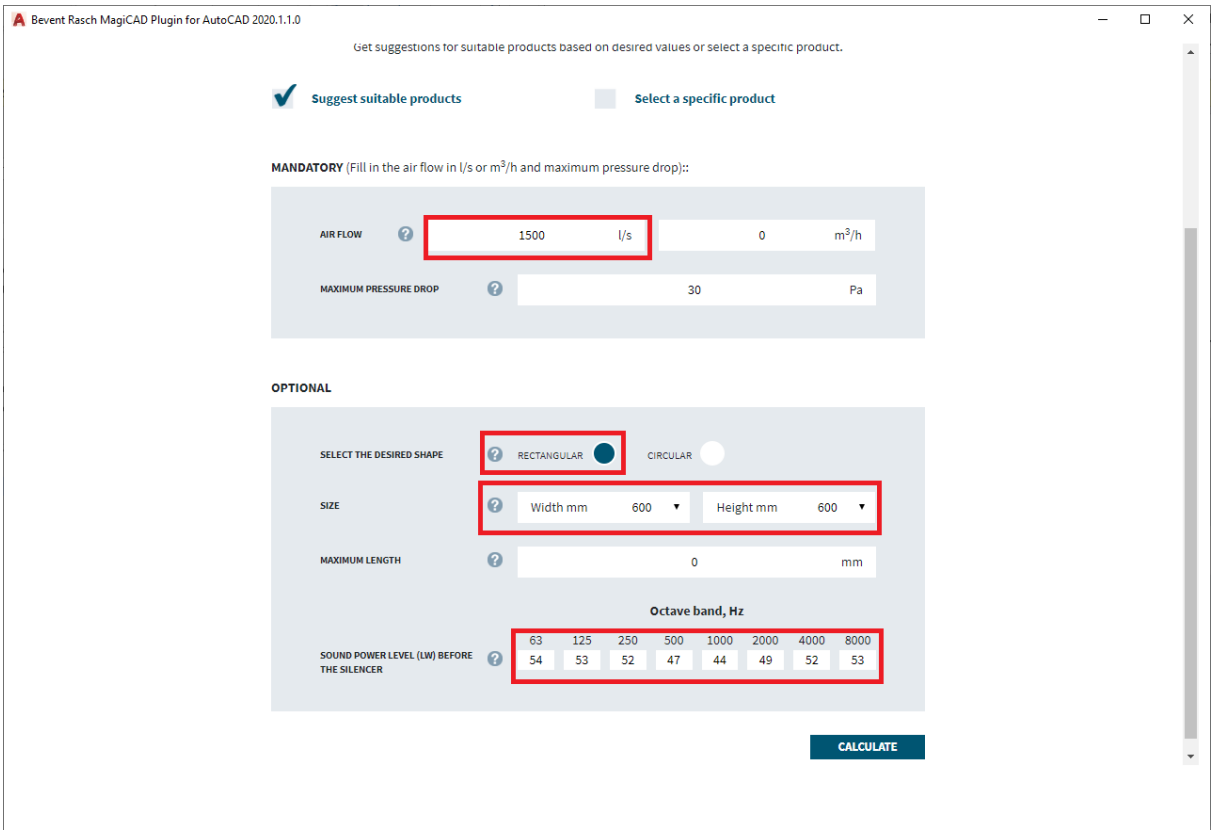

Notice though that if the flow summation, balancing and sound calculations have not been done in MagiCAD, the airflow and sound power levels are not available. If you skip selecting the duct, the wanted search parameters needs to be filled manually.

4. Once search parameters are ok, click the calculate -button, at the bottom of the view. Dimensio displays list of products that match the search criteria:

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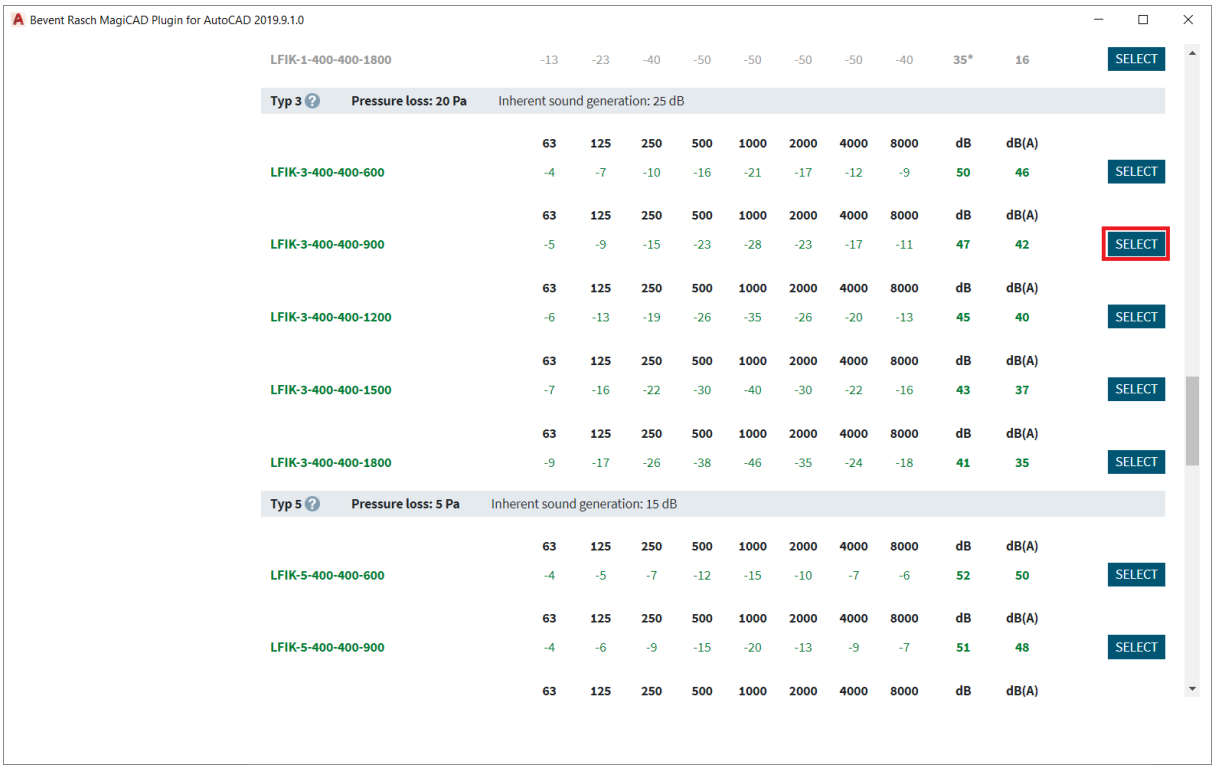

5. Proceed by selecting the product variant you want to use. When Select -button is clicked Dimensio load the product view:

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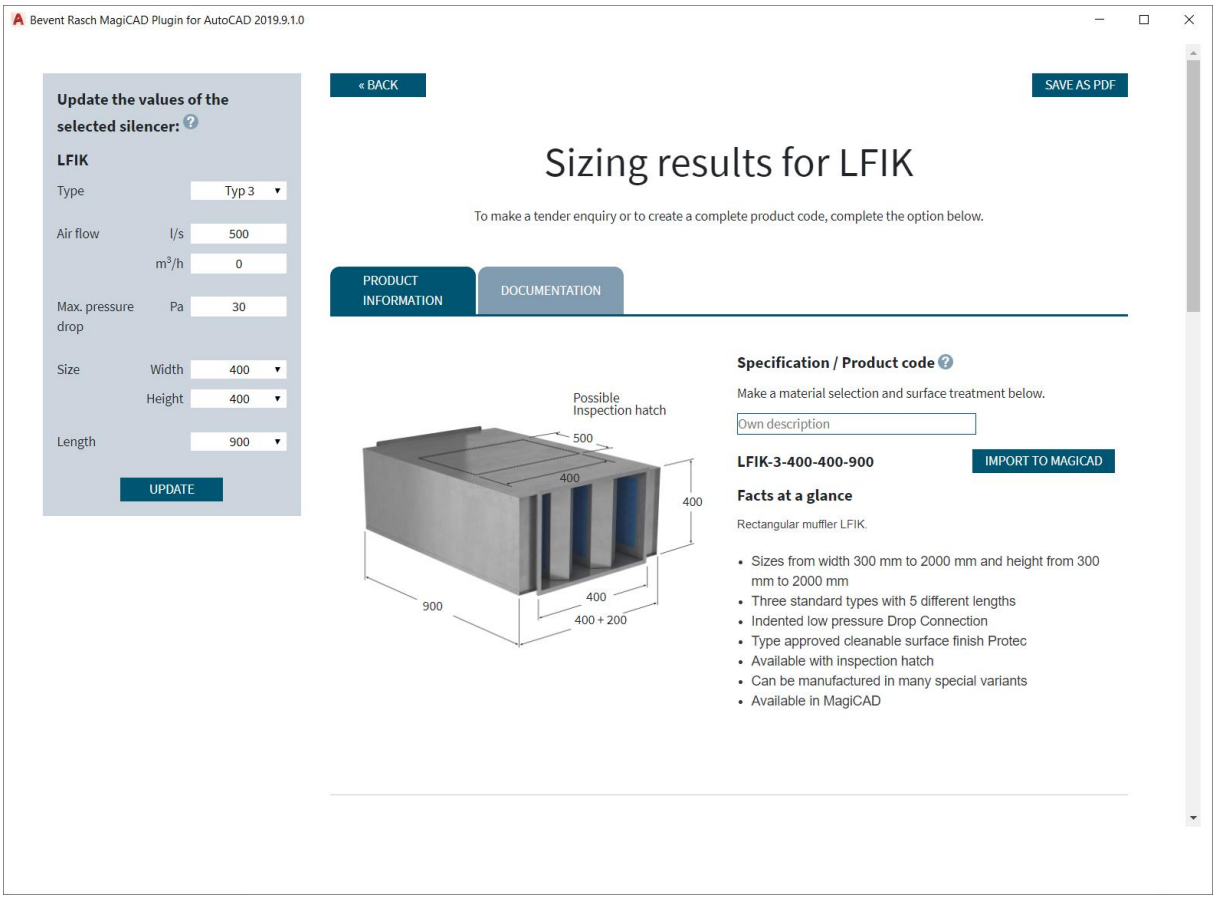

6. From product view click Import to MagiCAD -button in order to insert the silencer into MagiCAD project. Once the button is clicked, Dimensio window is closed and MagiCAD User Code dialog is loaded:

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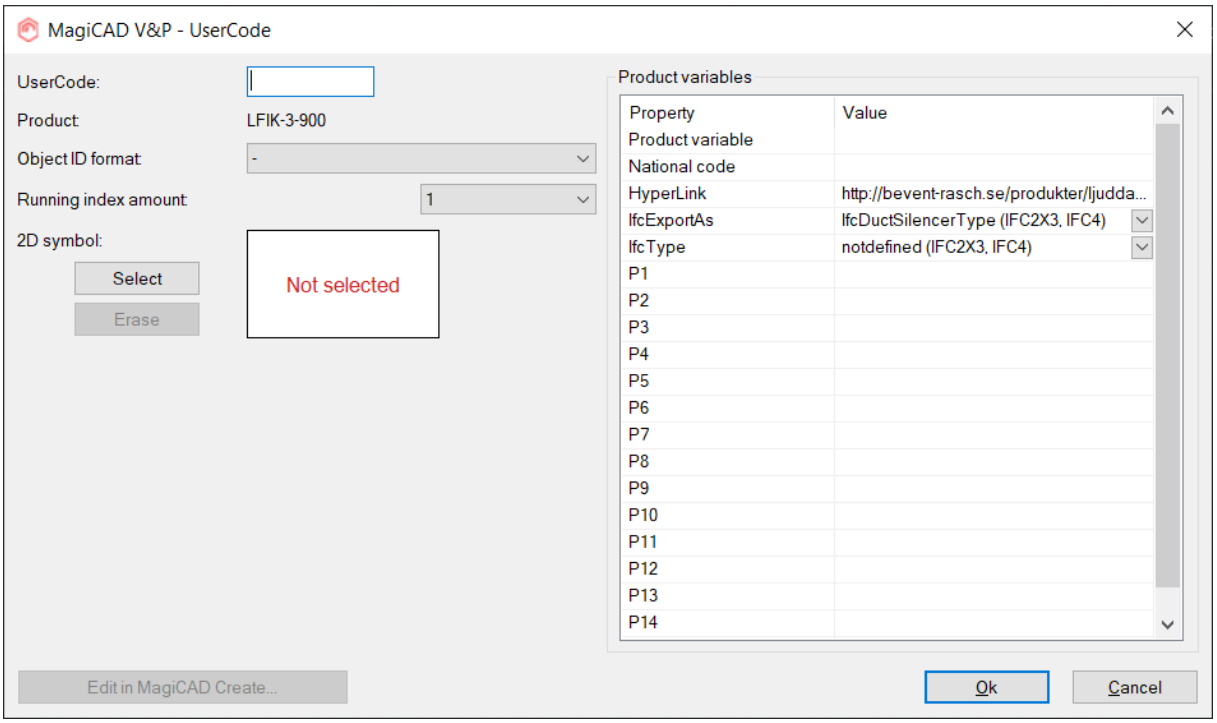
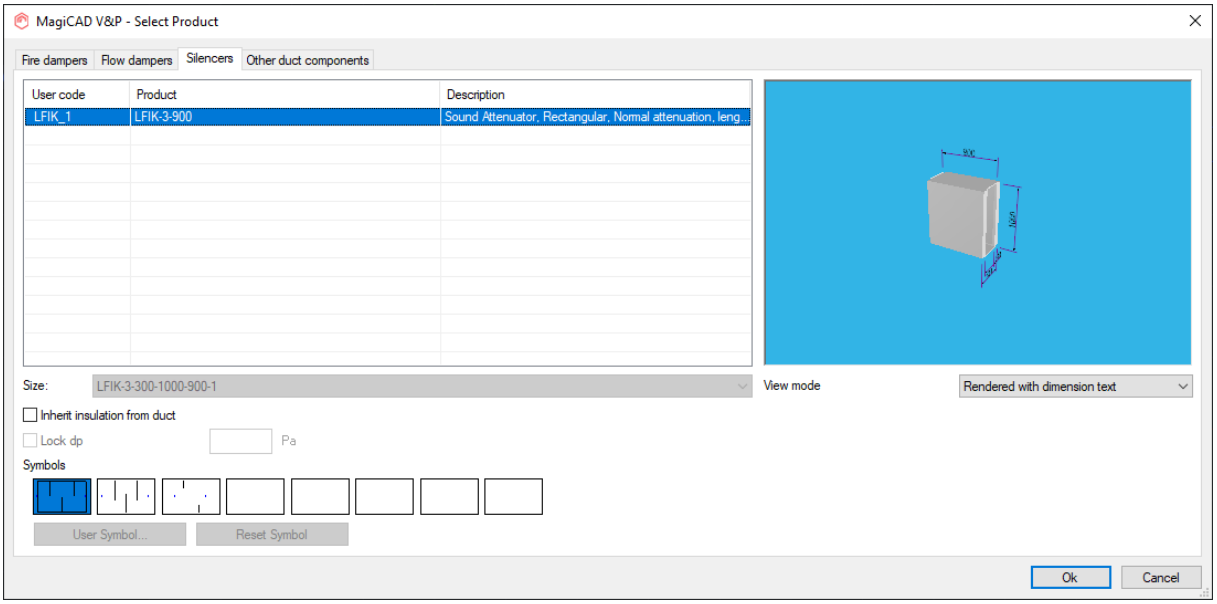


7. Proceed by entering the user code and optionally choosing the 2D symbol for the silencer. Once ready, click OK -button. MagiCAD Silencer dialog is opened, and selected product is active in the view, proceed by clicking the OK -button.



8. Silencer insert operation is started, place the product to the duct that you selected at the beginning of the command:

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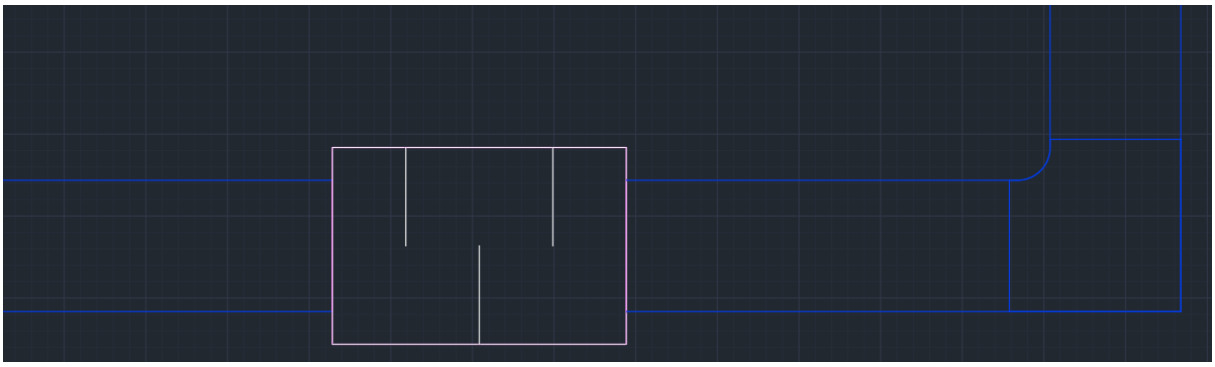

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