Bevent Rasch

MagiCAD plugin for BricsCAD – User guide

28/11/2024

MagiCAD

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1 General

About this document

This document contains instructions on using Bevent-Rasch MagiCAD for BricsCAD 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.

Installing the software

Required third-party software

Bevent-Rasch MagiCAD plugin supports the following BricsCAD and MagiCAD versions:

- BricsCAD V24
  - MagiCAD 2024 UR-1
  - MagiCAD 2024 UR-2
  - MagiCAD 2025
  - MagiCAD 2025 UR-1
- BricsCAD V25
  - MagiCAD 2025 UR-1

Before installation

1. Workstation administrator privileges are recommended for installation.

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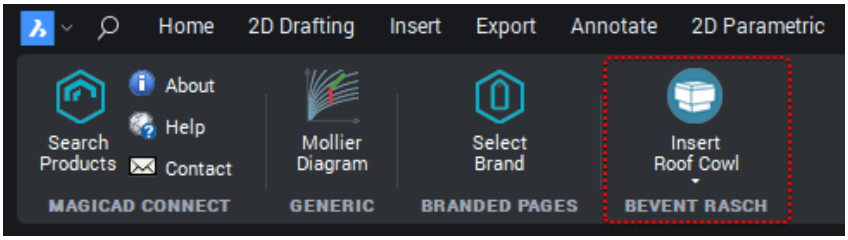
Starting the program

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 / BricsCAD.

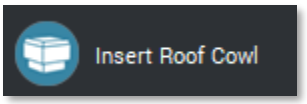
Bevent-Rasch MagiCAD plugin ribbon panel can be found from MagiCAD Connect tab:



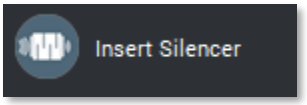
2 Functions

Bevent-Rasch plugin contains two operations:

- Insert Roof Cowl



- Insert Silencer



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Insert Roof Cowl operation

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

The plugin also includes support for insertion of Bevent-Rach combination roof cowls which means that the product will be attached in exhaust and outdoor systems. The basic workflow in plugin for inserting the different types of roof cowls and inlets always the same.

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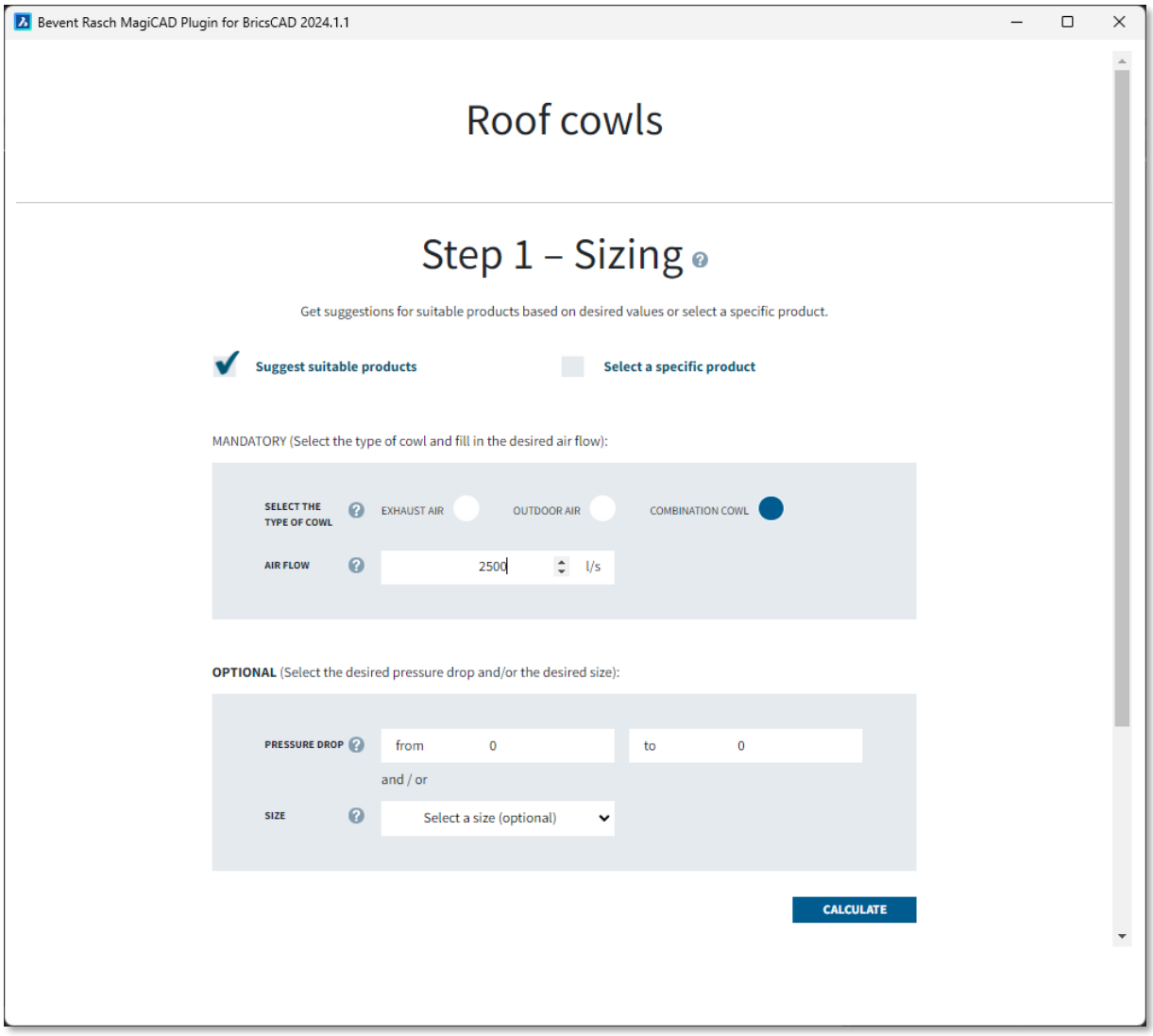
Detailed combination cowl and inlet insert operation in MagiCAD for BricsCAD

Follow these steps to insert combination roof cowl from Dimensio selection tool to BricsCAD drawing:

1. Click the “Insert Roof Cowl” button from the Bevent-Rasch panel. Once the operation is started the plugin opens the Dimensio selection tool.

   Proceed by selecting the type of the cowl (combination cowl) and enter the required airflow and other specific 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 a list of suitable products.



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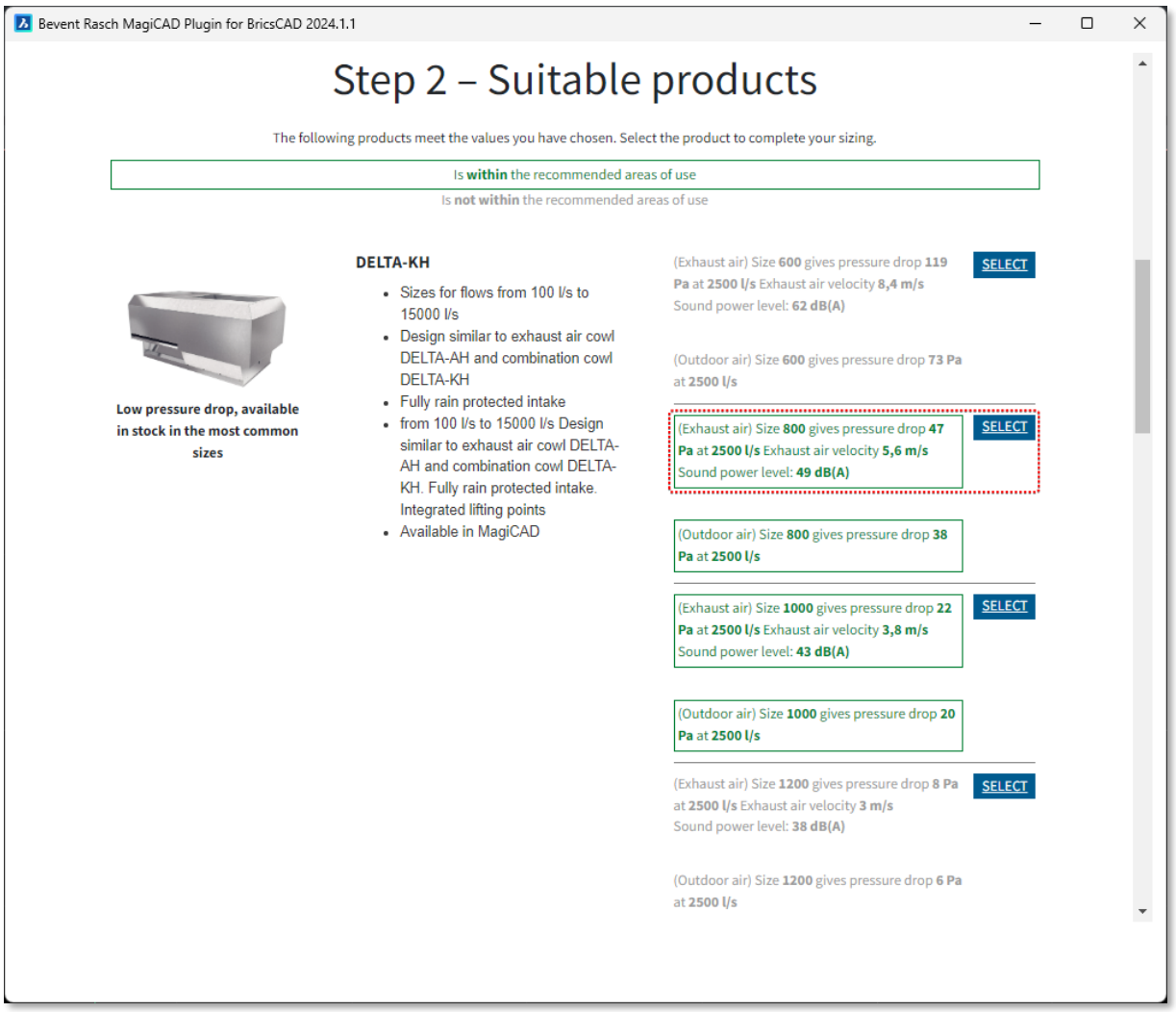
2. Proceed by choosing the product variant and click the select button. From select button Dimensio shows the detail product view.



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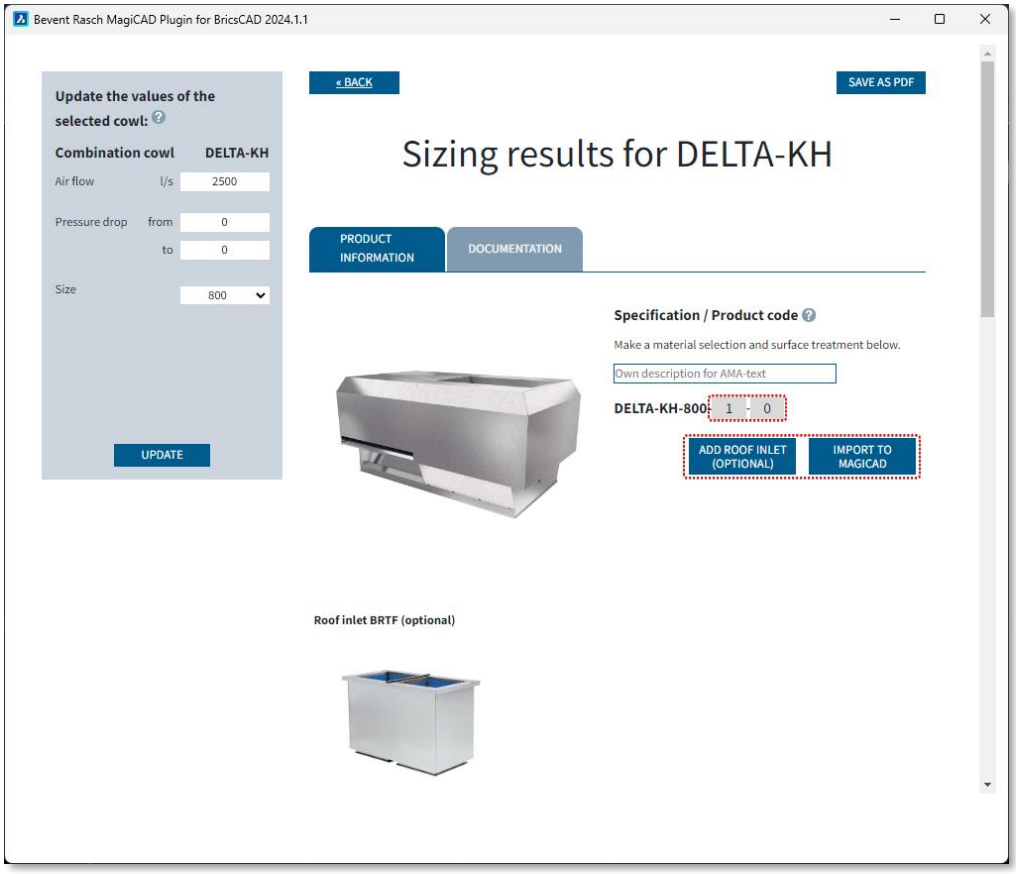
3. In detail product view, it's still possible to make the final changes to the product variant. Once all the changes are made, you can proceed by clicking the Import to MagiCAD button, which initiates the roof cowl insert operation to MagiCAD drawing.

   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, user adds the roof inlet to the list of products to be imported in to MagiCAD and the Roof inlet view is closed.

   The final configured product can be also saved as PDF file. The save as pdf file button will generate the document and it's opened in the default PDF viewer application.



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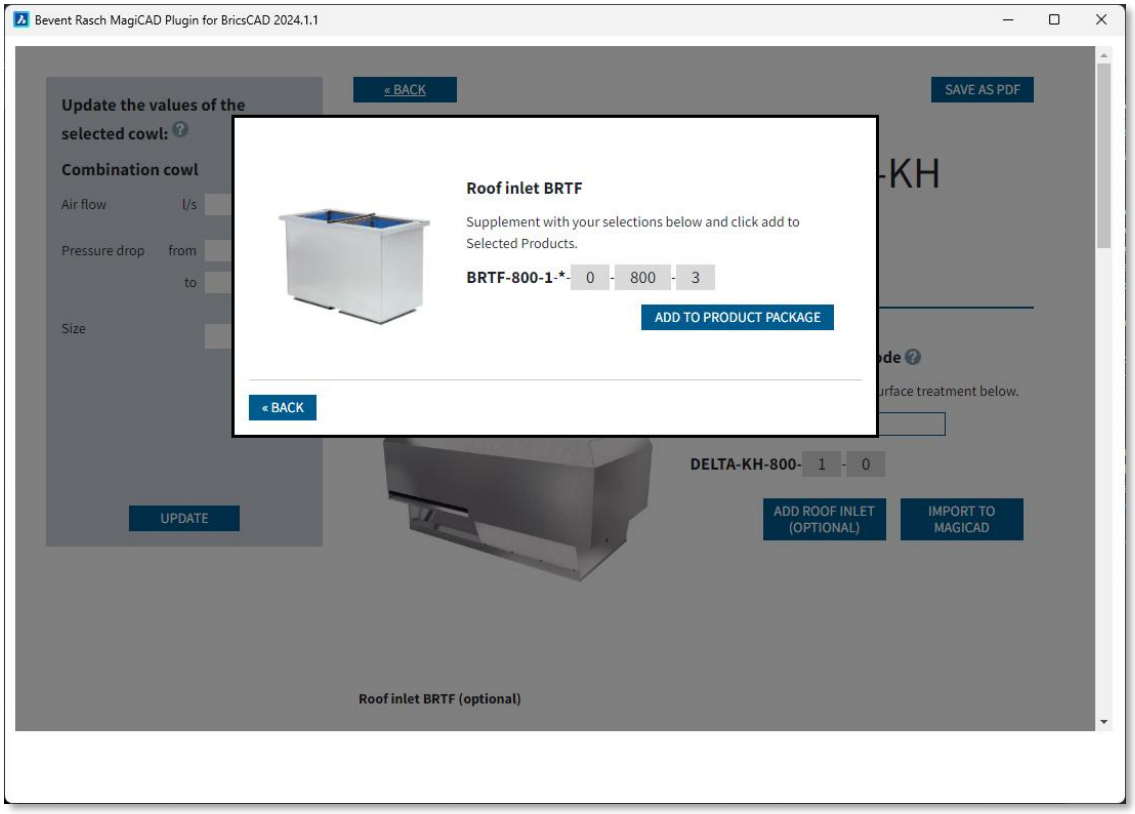

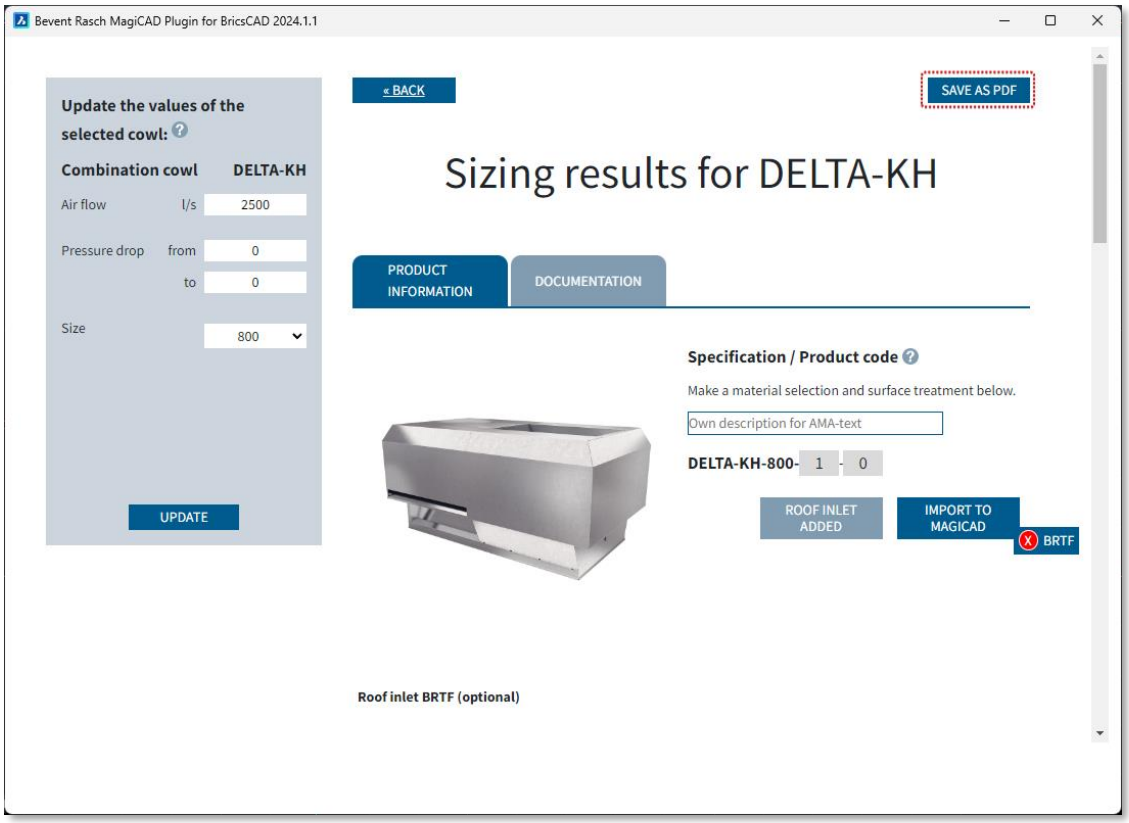

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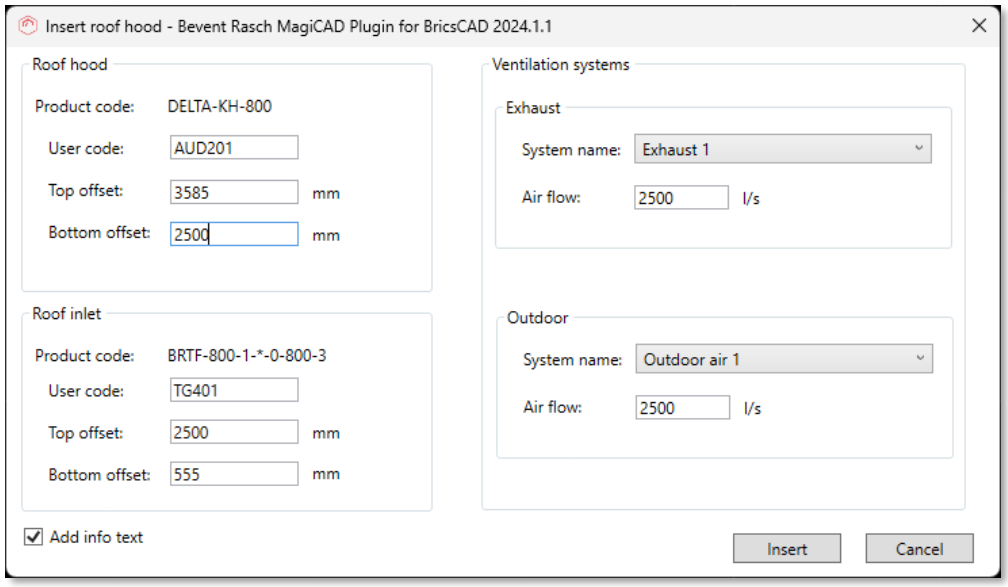
4. Import to MagiCAD button starts the insert operation in BricsCAD. Dimensio view is closed and Insert roof hood view is shown.

   In insert view the following fields must be filled:

   - **User code:** MagiCAD specific user code of the roof cowl is entered here.
   - **Offsets of cowl and inlet:** 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 system name:** MagiCAD exhaust system for the roof cowl. Disabled if the imported cowl is connected only to outdoor system.
   - **Exhaust system airflow:** Airflow of the exhaust system 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.
   - **Outdoor system name:** MagiCAD outdoor system for the roof cowl. Disabled if the imported cowl is connected only to exhaust system. For combination cowls both systems are enabled.
   - **Outdoor system airflow:** Airflow of the outdoor side is entered here. Disabled if the imported cowl is connected only to exhaust system. By default the field is filled with the search criteria value filled in Dimensio.
   - **Roof inlet User Code:** MagiCAD specific user code for the roof inlet is entered here.
   - **Add info text:** Product specific info text will be generated to drawing.



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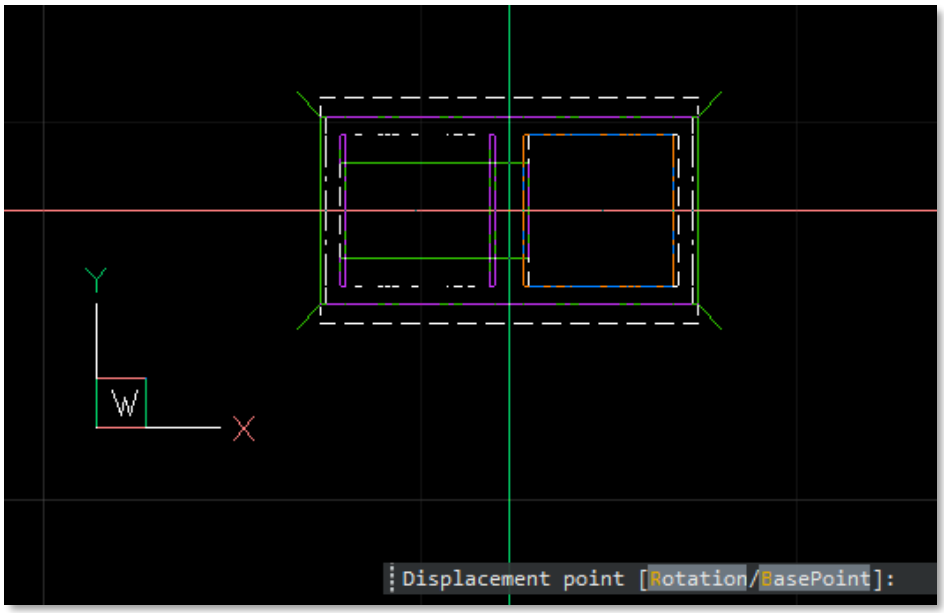
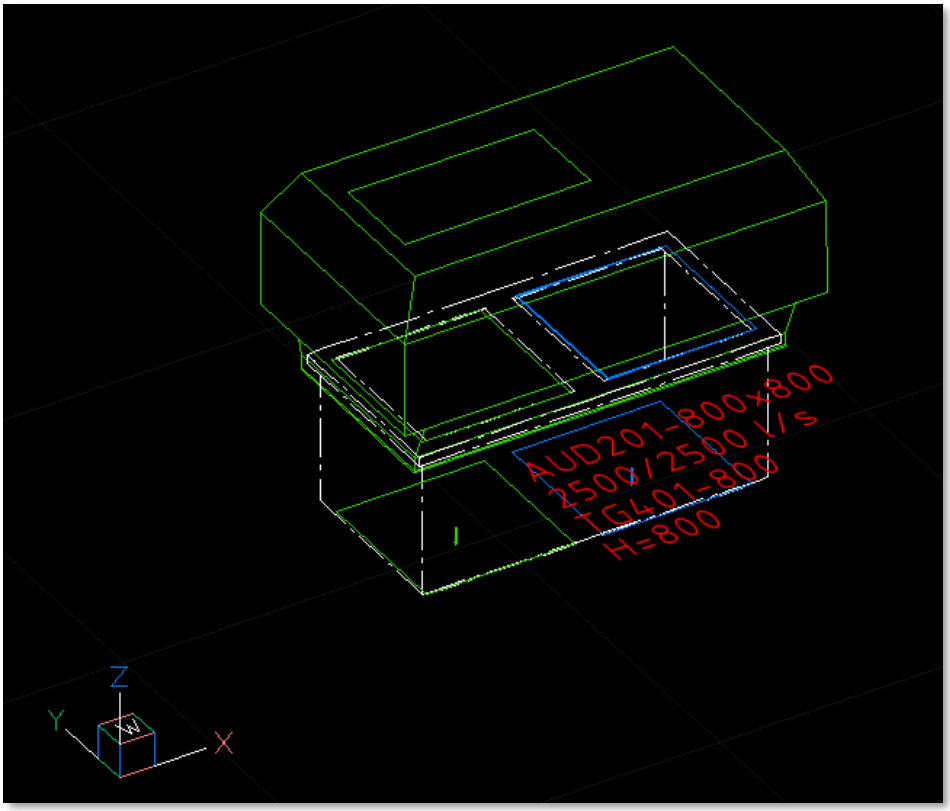
5. Once the required fields have been filled, proceed by clicking the insert button, which allows to place the products (cowl + roof inlet handled as one product package) in to drawing.

   After placement is done, it's possible to rotate the product.
   With combination cowls the plugin creates an additional connector for the outdoor system.





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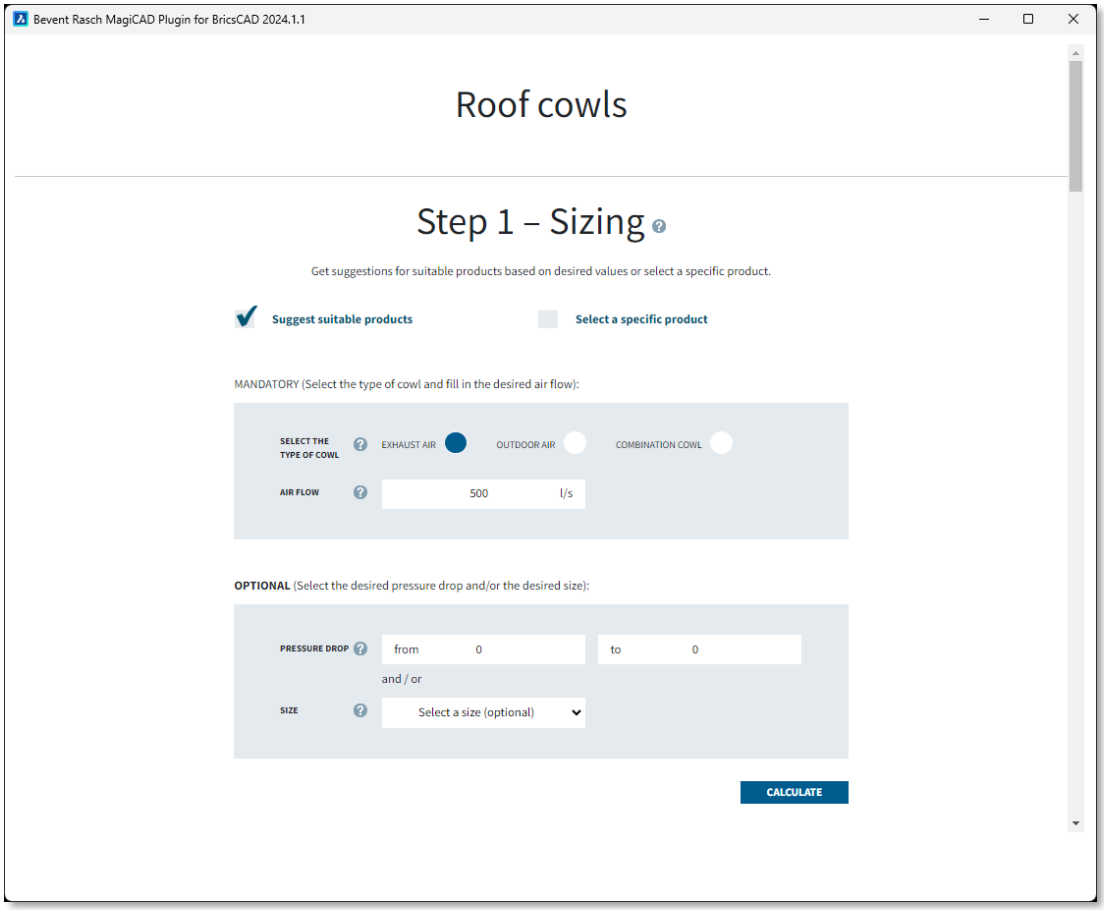
Detailed exhaust or outdoor cowl and inlet insert operation in MagiCAD for BricsCAD

1. Click the “Insert Roof Cowl” button from the Bevent-Rasch panel. Once the operation is started the plugin opens the Dimensio selection tool.

   Proceed by selecting the type of the cowl (exhaust or outdoor) and enter the required airflow and other specific 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 a list of suitable products.



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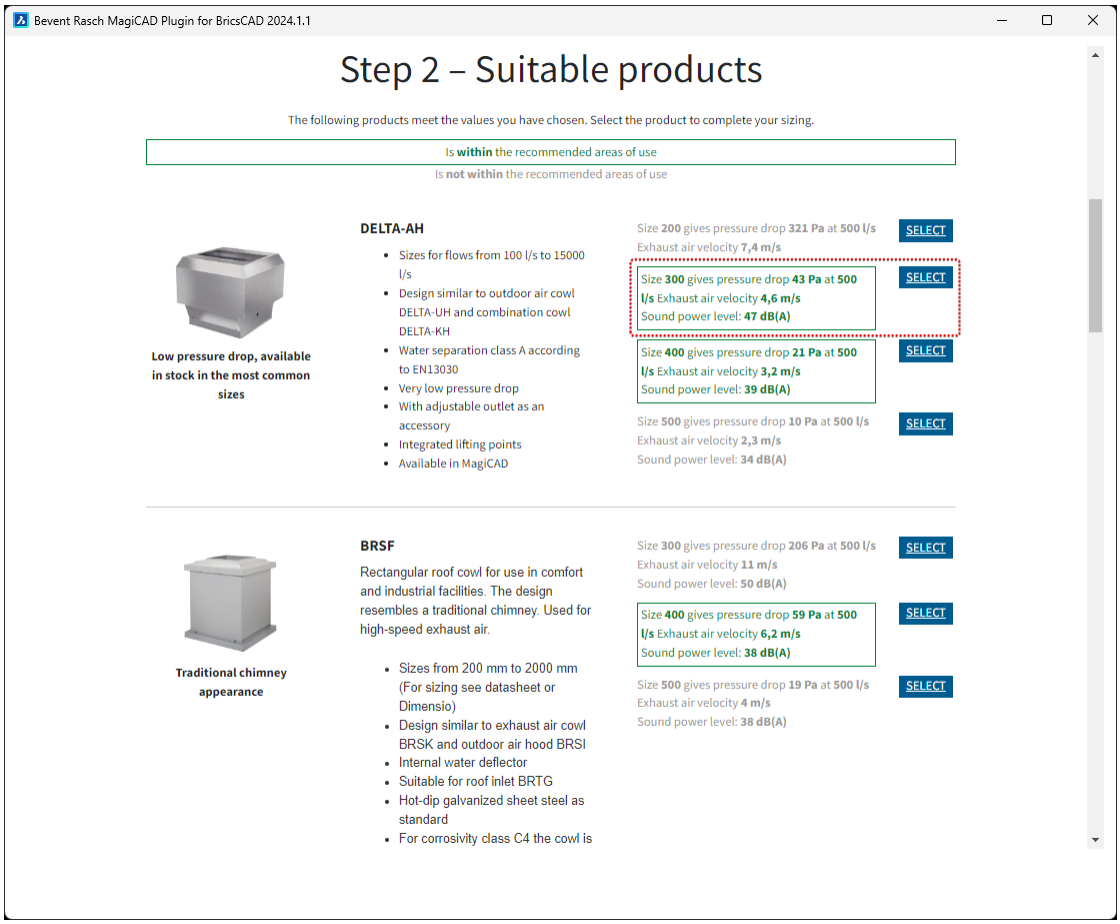
2. Proceed by choosing the product variant and click the select button. From select button Dimensio shows the detail product view.



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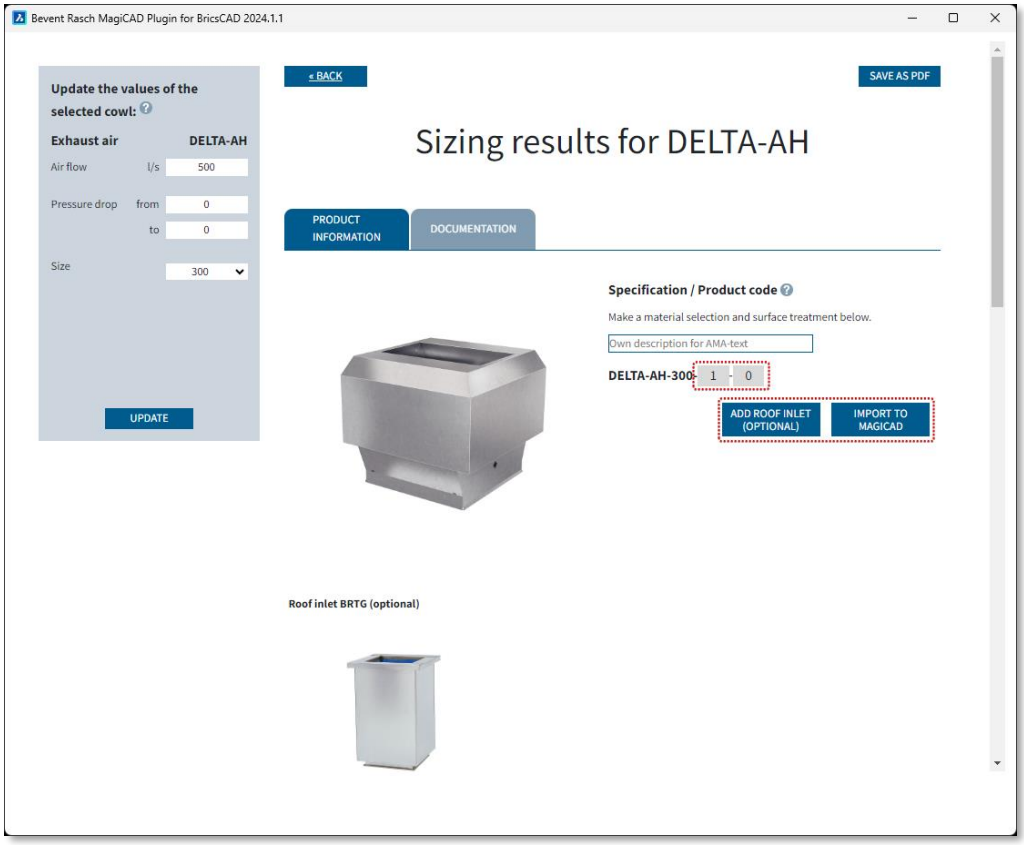
3. In detail product view, it's still possible to make the final changes to the product variant. Once the changes are made, you can proceed by clicking the Import to MagiCAD button, which initiates the roof cowl insert operation to MagiCAD drawing.

   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, user adds the roof inlet to the list of products to be imported in to MagiCAD and the Roof inlet view is closed.

   The final configured product can be also saved as PDF file. The save as pdf file button will generate the document and it's opened in the default PDF viewer application.



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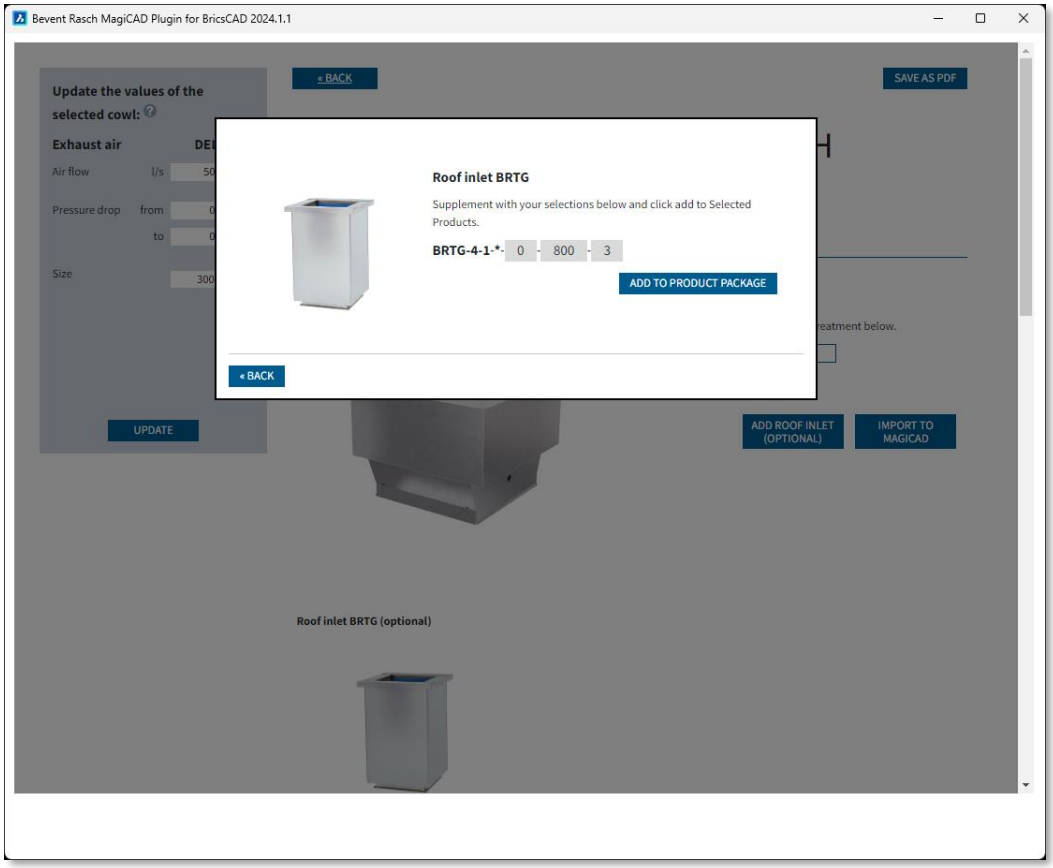

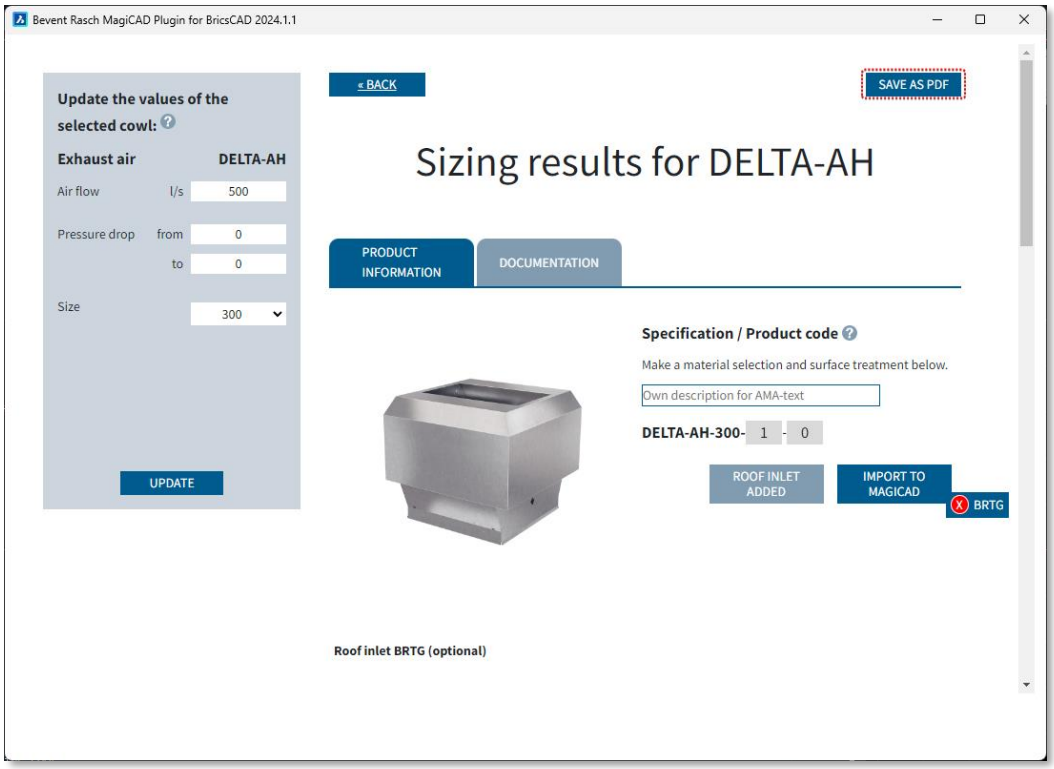

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4. Import to MagiCAD button starts the insert operation in BricsCAD. Dimensio view is closed and Insert roof hood view is shown.

   In insert view following fields must be filled:

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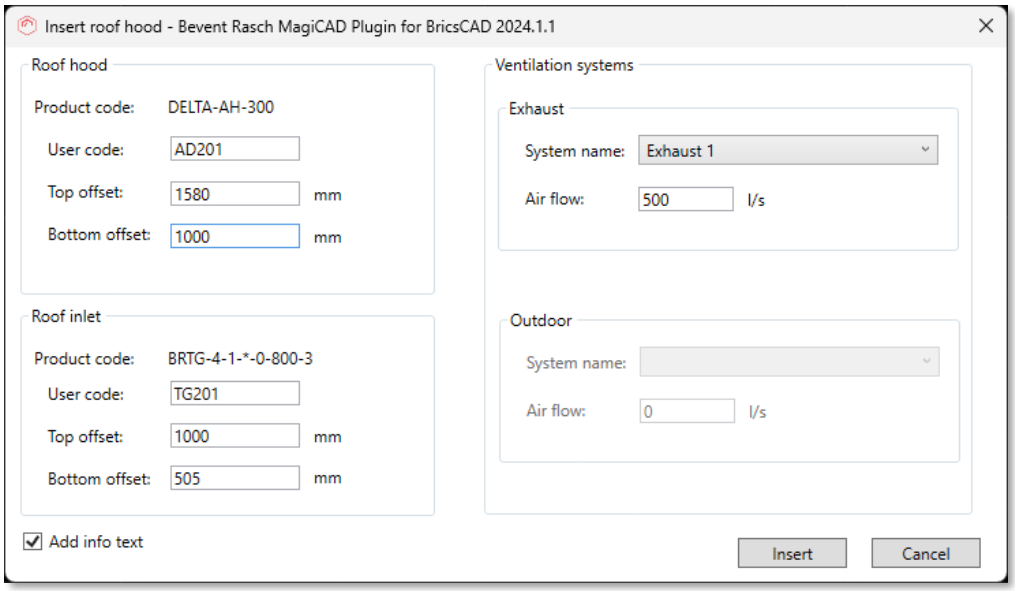
   - **Offsets of cowl and inlet:** Insertion point of the roof cowl. Roof inlet is installed automatically below the roof cowl and connected to it (there is duct of minimum length between cowl and roof inlet).
   - **Exhaust system name:** MagiCAD exhaust system for the roof cowl. Disabled if the imported cowl is connected only to outdoor system.
   - **Exhaust system airflow:** Airflow of the exhaust system 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.
   - **Roof inlet User Code:** MagiCAD specific user code for the roof inlet is entered here.
   - **Add info text:** Product specific info text will be generated to drawing.



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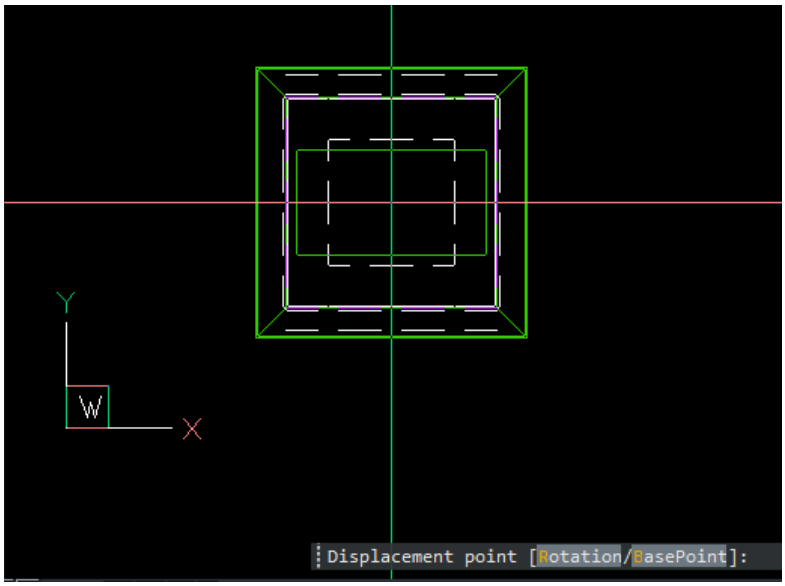
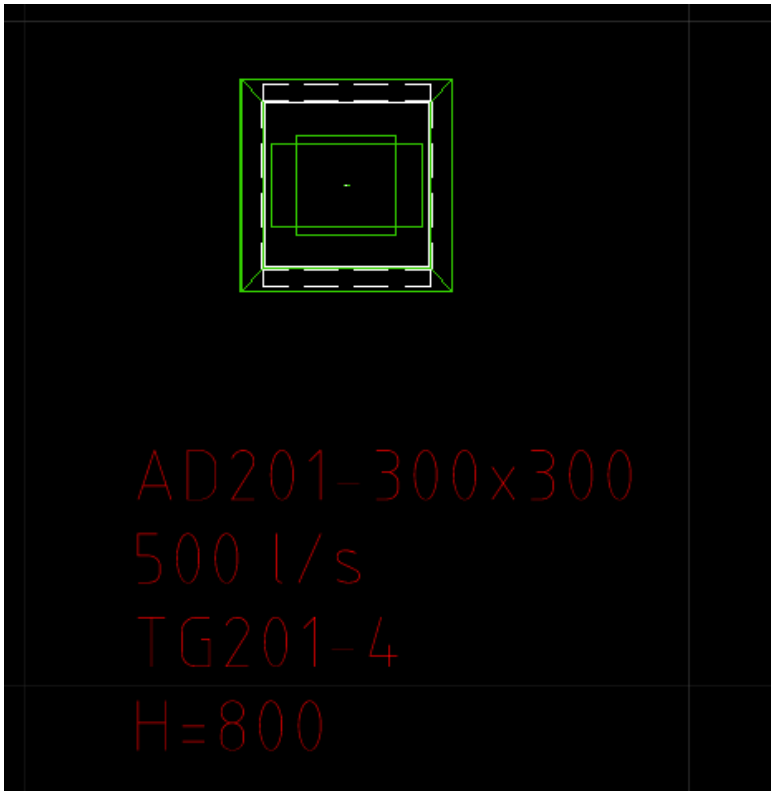
5. Once the required fields have been filled, proceed by clicking the insert button, which allows to place the products (cowl + roof inlet handled as one product package) in to drawing.

   After placement is done, it’s possible to rotate the product.





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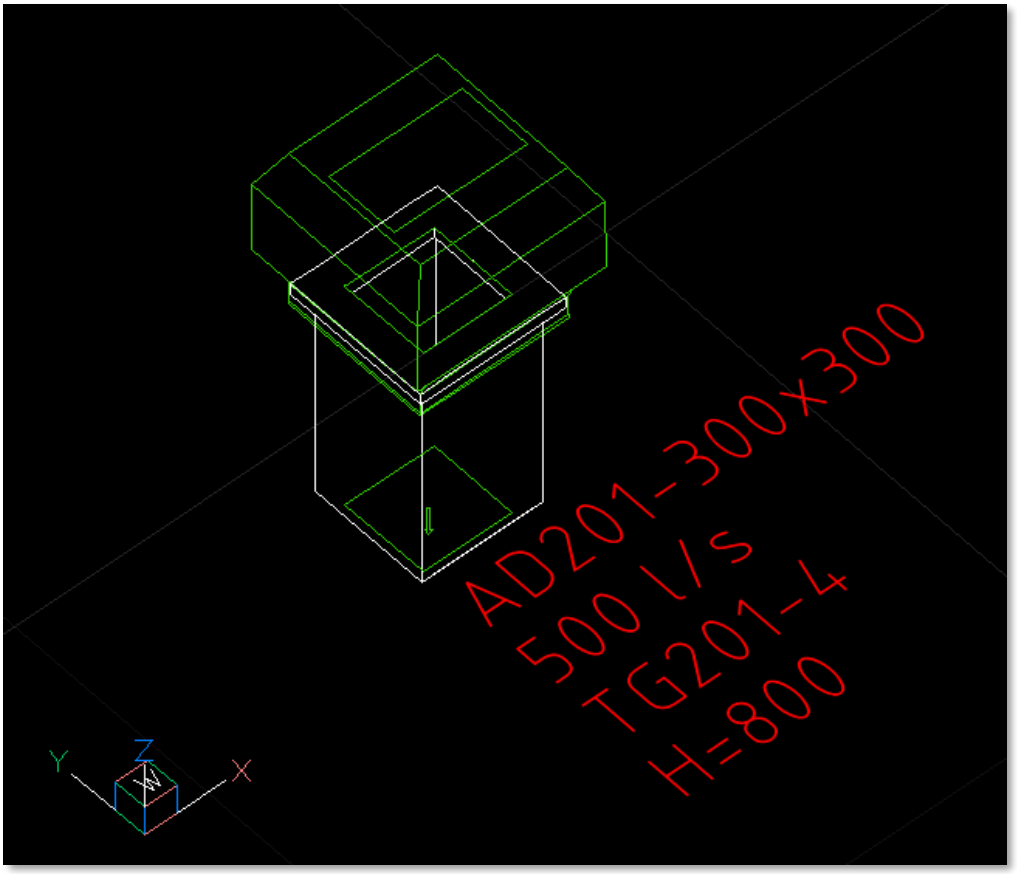

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Insert silencer operation

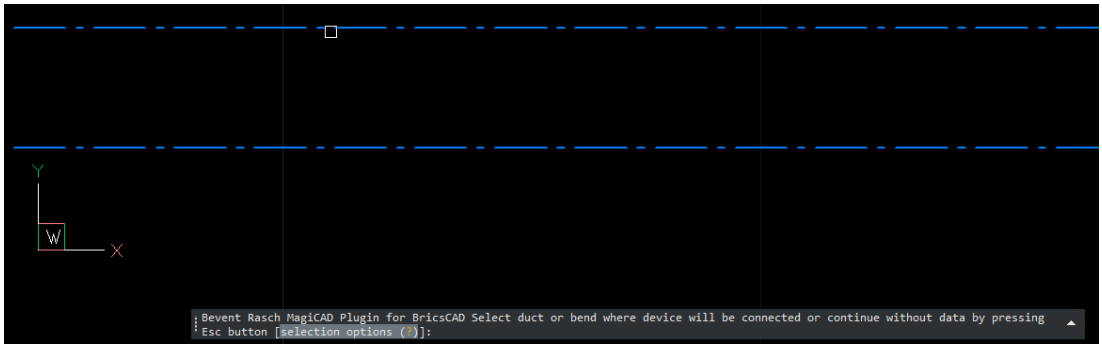
This command opens Dimensio selection tool allowing user to filter and select suitable silencers and finally insert the selected silencer into BricsCAD drawing and MagiCAD project.

Detailed insert silencer operation in MagiCAD for BricsCAD

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

1. Click the “Insert Silencer” button from Bevent-Rasch ribbon panel located in the MagiCAD Connect tab.

2. Plugin asks user to selected the duct where to connect the silencer to (this step can be skipped by pressing the ESC button).



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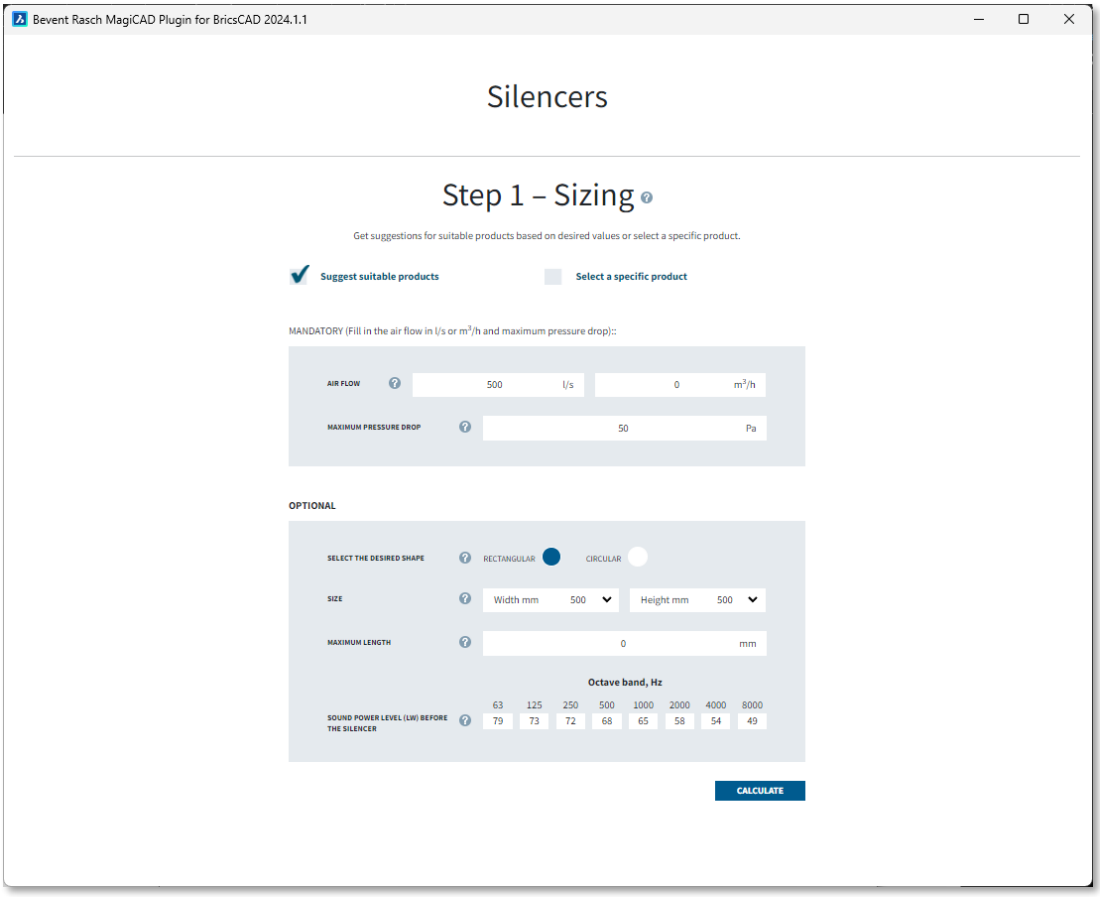
3. Once the duct has been selected, plugin opens the Dimensio selection tool for silencer selection. Notice that most of the search criteria fields have been automatically filled with the parameters read from the selected duct.

   Notice also that if the flow summation, balancing and sound calculations have not been done for the ductwork in MagiCAD, the airflow and sound power levels are not available. If you skip selecting the duct, the sound power level values needs to be filled manually.

   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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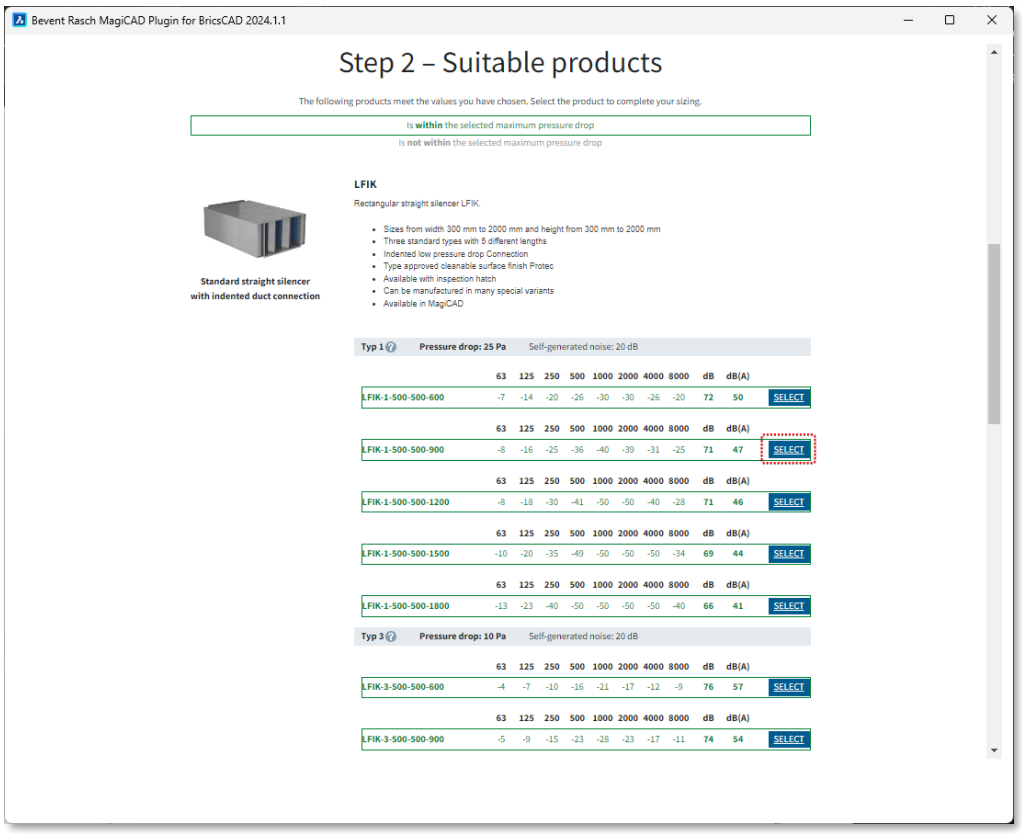
4. Proceed by selecting the product variant you want to use. When Select -button is clicked Dimensio loads the detail product view.



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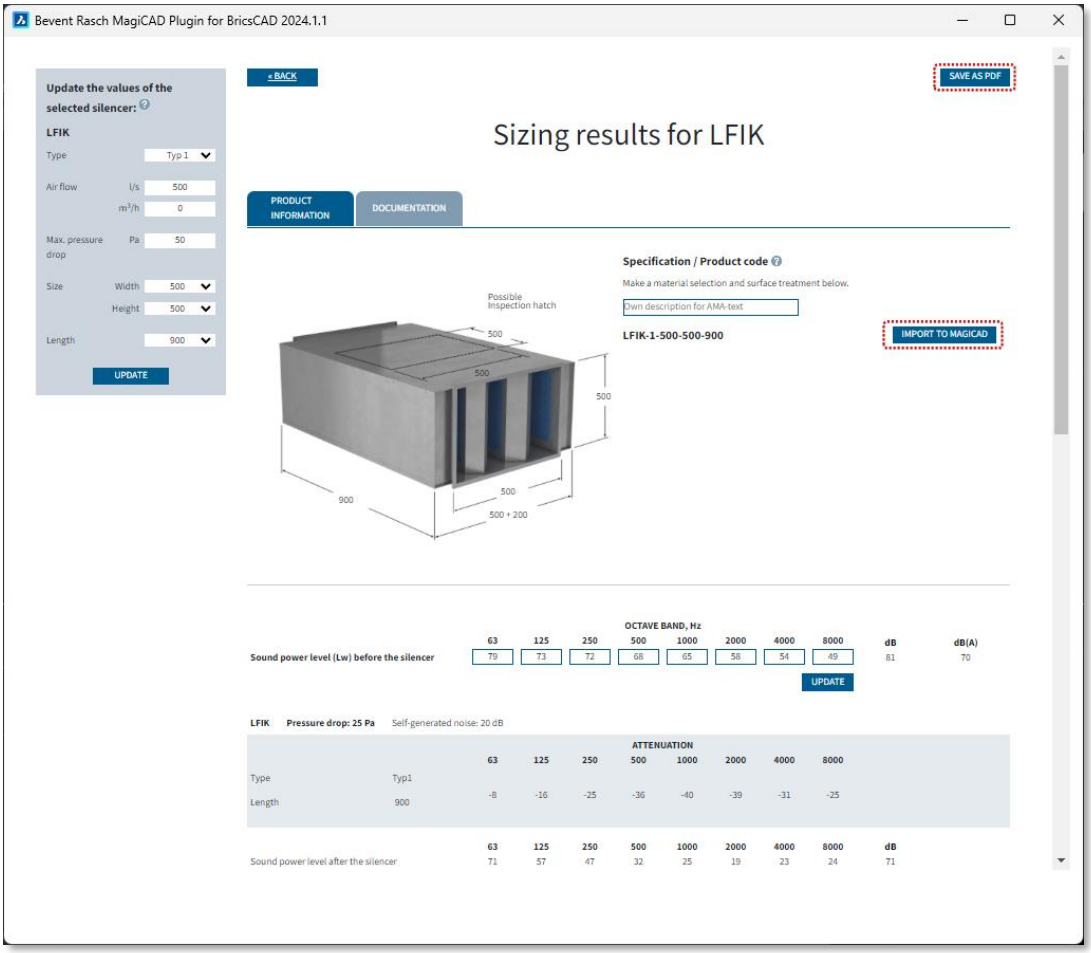
5. Proceed by selecting the product variant you want to use. When Select -button is clicked Dimensio load the product view.

   The final configured product can be also saved as PDF file. The save as pdf file button will generate the document and it's opened in the default PDF viewer application.

   Click the Import to MagiCAD button in order to insert the silencer into MagiCAD project and BricsCAD drawing. Once the button is clicked, Dimensio view is closed and MagiCAD UserCode dialog is opened.



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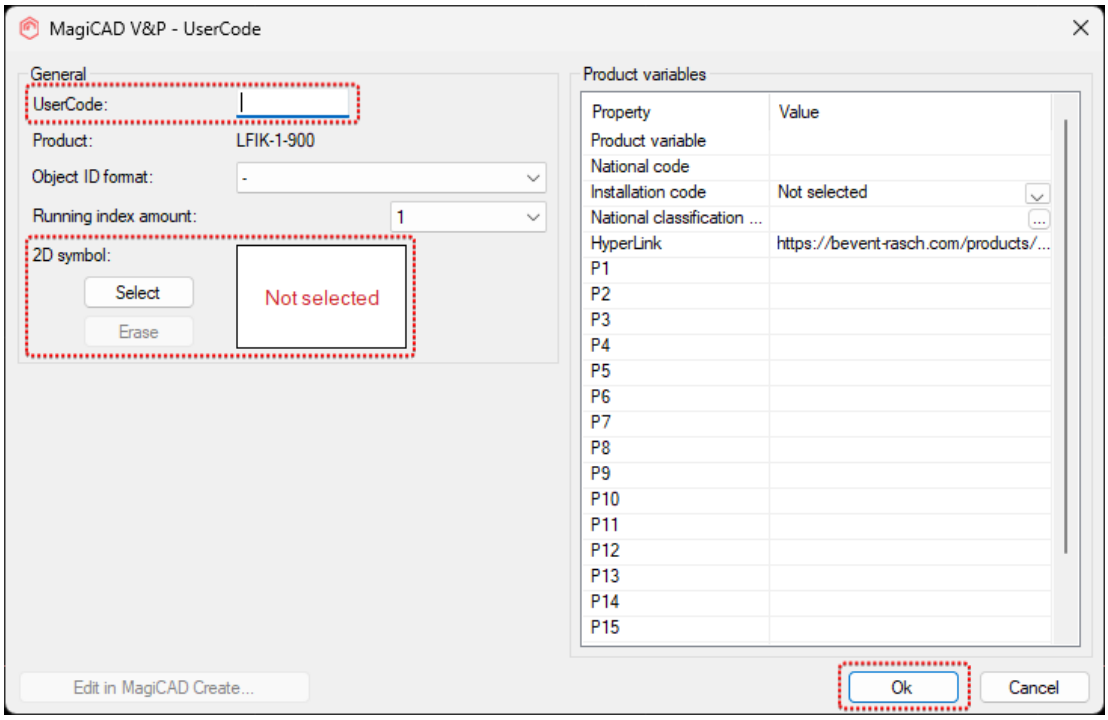
6. Proceed by entering the user code and optionally choosing the 2D symbol for the silencer. Once ready, click OK button.



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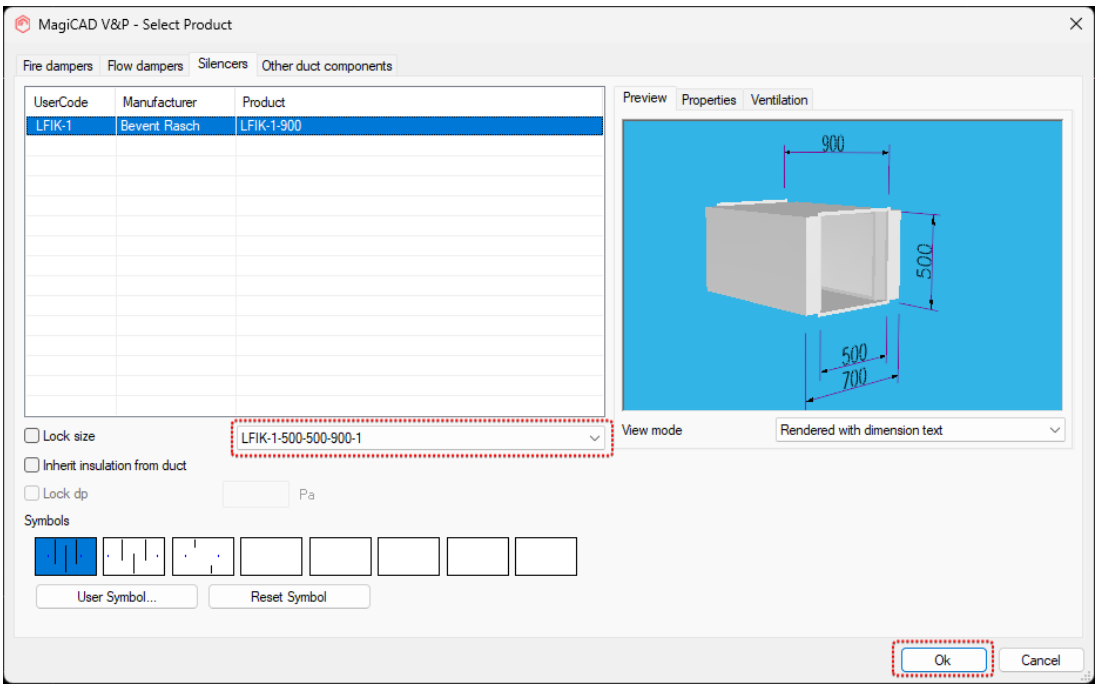
7. MagiCAD Select Product dialog with silencers is opened and selected product is active in the view. Make sure that the correct size variant is selected and proceed to insert by clicking the OK button.



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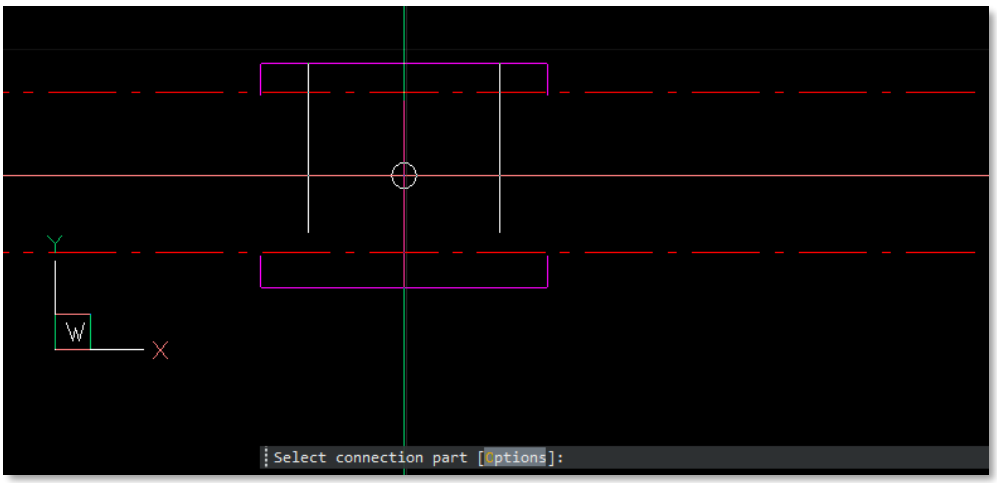
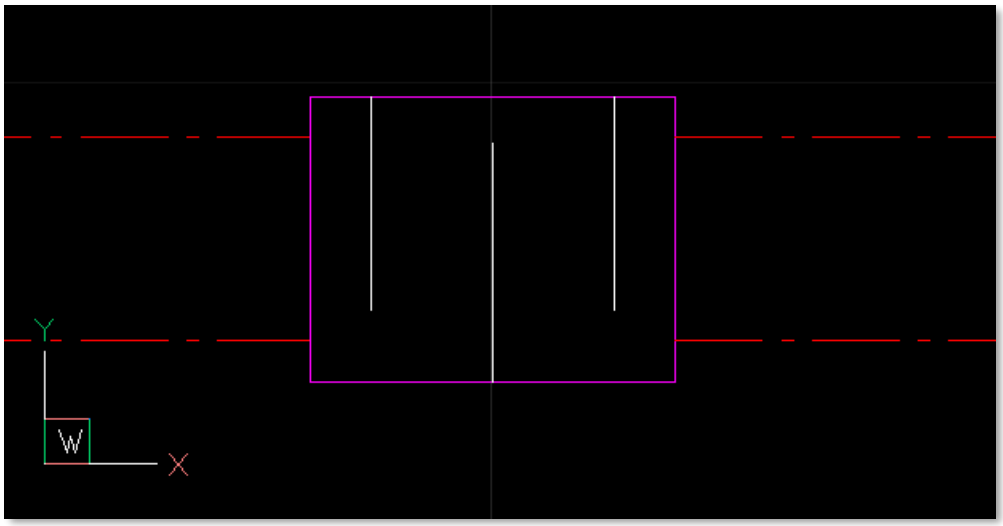
8. Silencer insert operation is started, place the product to the duct that you selected at the beginning of the command.





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