NIBE MagiCAD Plugin for Revit

User guide

19/12/2025

MagiCAD

Content

1   General

1.1   About this document

This document contains instructions on using *NIBE MagiCAD plugin for Revit*. The plugin enables users to add air handling units into Revit and MagiCAD for Revit from the NIBE Dim Vent web application.

1.2   Installing the Software

1.2.1 Required Third-party Software

NIBE MagiCAD plugin works with the following MagiCAD and Revit versions:

Revit
- Revit 2023 - 2026

MagiCAD (optional)
- MagiCAD for Revit 2025 with Revit 2023 - 2025
- MagiCAD for Revit 2026 with Revit 2023 - 2026

1.2.2 Installation

1. Download setup file from
   https://portal.magicad.com/download/ProductSearch?searchStr=Nibe&categoryId=3

2. Install NIBE MagiCAD Plugin for Revit.

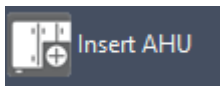Administrator privileges are needed for the installation.

2   Features

## 2.1   NIBE MagiCAD Plugin User Interface

The plugin can be found from *MagiCAD Connect* tab in Revit.
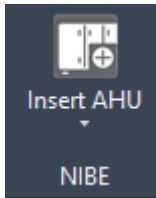
The plugin contains following features for air handling units:

The feature opens the NIBE Dim Vent web application where the air handling units can be created and configured. Once the air handling unit has been calculated in the web application, the air handling unit can be added to Revit.
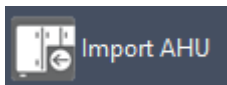
The feature opens a file dialog from which the user can choose a .mah file and import the air handling unit to Revit.
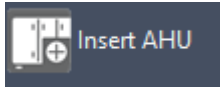

The selected air handling unit will be replaced/updated to Revit after the air handling unit has first been calculated in the web application.
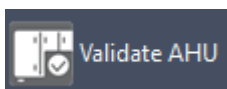

The feature checks whether the user needs to perform an update operation for the selected air handling unit.

2.2 Insert AHU

Follow these steps for inserting NIBE air handling unit into MagiCAD/Revit:

1. Click the *Insert AHU* button from the plugin ribbon panel in Revit.

2. The plugin asks to point ductworks for getting airflows, pressure drops and MagiCAD systems. This phase can be skipped by pressing *Cancel* button without selecting any ducts. Pressing the *Esc* key on the keyboard will also cancel the selection of ducts.
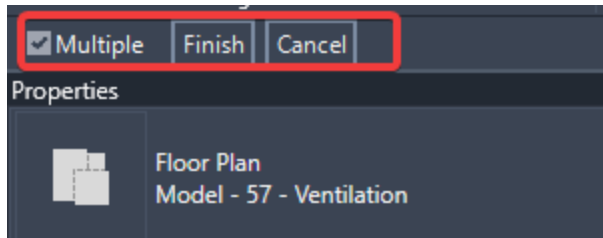
3. The Dim Vent web application will be opened inside the plugin window.

   If the user has not already logged in to the Dim Vent, the username and password are requested from the user.

   Create the account to the Dim Vent web application via this link NIBE Professional before using the plugin.

4. Once the user has logged in to the web application, the project page is displayed. On this page, the user can create and modify projects. It is also possible to add a new air handling unit to the selected project.

5. When the *Create New Unit* button is clicked from the web application, the dialog will be opened where the user can search for a suitable air handling unit. If ducts were selected from the drawing in step 2, the data is read from the ducts and the data is pre-filled into corresponding fields in the Dim Vent.

   The air handling unit can be selected from a list or by searching for a suitable unit using airflow and pressure drop data.

6. Once the air handling unit has been selected, the next step is to click the *Create Unit* button.

7. The next step is to select properties of the air handling unit. When the properties are selected, clicking the *Perform Calculation* button will calculate the air handling unit.

8. Once the air handling unit has been successfully calculated, clicking the *Insert* button from the plugin closes the browser window and starts inserting the unit into Revit.

   If the air handling unit is not calculated and the *Insert* button is clicked, the plugin shows the message "*The product data is not available. Please ensure that the product definition is finished.*". In this case, please make sure that the air handling unit is calculated.

9. The plugin installation dialog will appear.
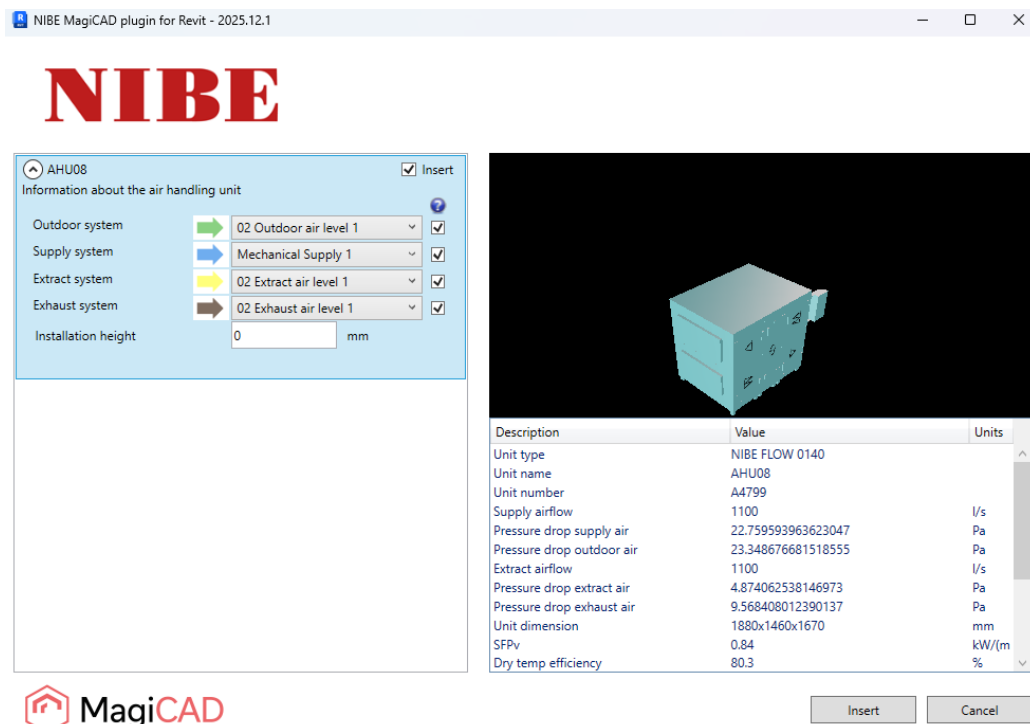
The geometry of the product is displayed on the top right side. The product can be zoomed with the mouse wheel.

Before installing the product to MagiCAD for Revit or Revit, the systems can be selected for each duct connection. The available systems are read from the active Revit project.

The plugin supports also pipe connections (heating and/or cooling). The system selections for the pipes are shown in the installation dialog if the air handling unit contains pipe connections.

The installation height (offset) of the product can be defined in the insertion dialog.

10. Once systems have been defined for all products, the installation can be started by clicking the *Insert* button. Selecting systems is optional.

11. The products can be placed to Revit project one by one by adding them to the desired position.
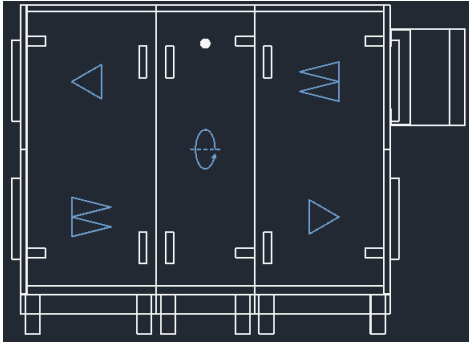
Once the air handling unit is inserted into Revit, it can be connected to ducts and pipes.

2.3 Import AHU
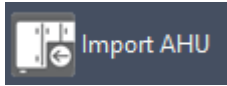
This feature allows the plugin user to select a file exported from the NIBE Dim Vent web application (*.MAH extension) and import the air handling unit(s) from the file to MagiCAD for Revit and Revit.

Before the *Import AHU* feature from the plugin is used, the air handling unit(s) needs to be first exported from the NIBE Dim Vent web application.

The Dim Vent user and the plugin user can be a different person.

Follow these steps for importing a NIBE air handling unit into MagiCAD for Revit or Revit.

1. Click the *Import AHU* button from the plugin ribbon panel in Revit.

2. Select the MAH file from the file dialog.

3. After clicking the *Open* button, the plugin reads the transfer file (*.MAH) and loads the air handling unit(s) to the insertion dialog.

The geometry of the product is displayed on the top right side. The product can be zoomed with the mouse wheel.

Before installing the product to MagiCAD for Revit or Revit, the systems can be selected for each duct connection. The available systems are read from the active Revit project.

The plugin supports also pipe connections (heating and/or cooling). The system selections for the pipes are shown in the installation dialog if the air handling unit contains pipe connections.
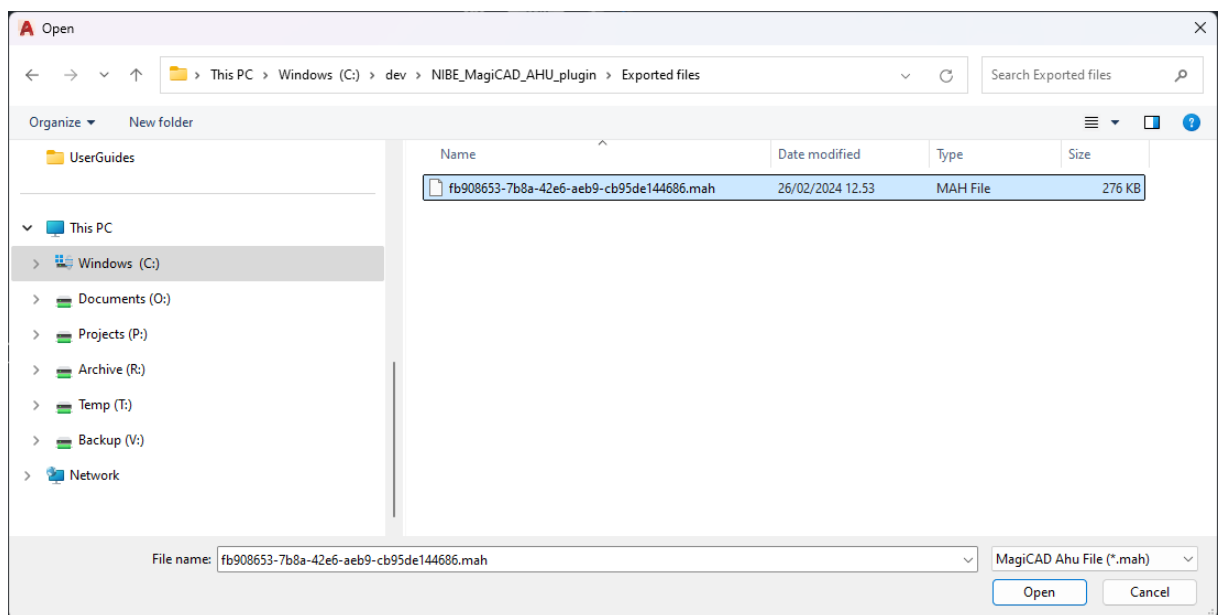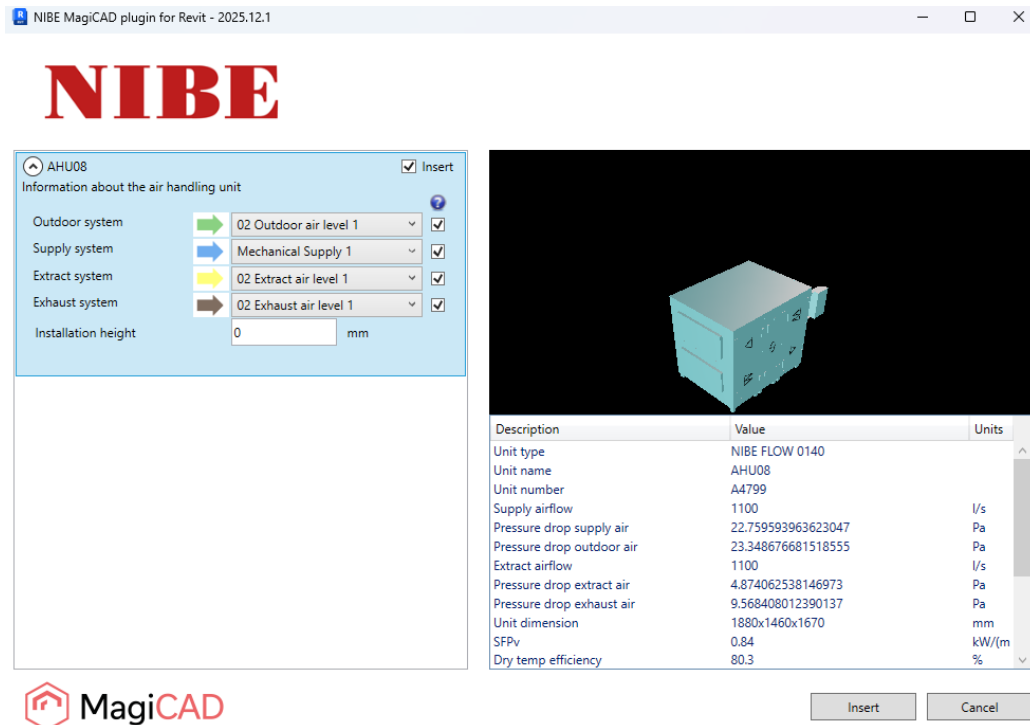
The installation height (offset) of the product can be defined in the insertion dialog.

4. Once the selections have been made in the insertion dialog, the insert operation can be started by clicking *Insert* button.

5. The product(s) can be placed in the Revit project one by one by dragging them to the wanted position. Once the air handling unit is inserted into Revit, it can be connected to ducts and pipes.
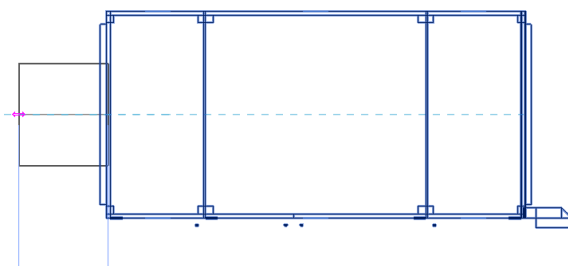
2.4   Update AHU

Follow these steps to update NIBE air handling unit to Revit:

1. Click the *Update AHU* button from the plugin ribbon panel in Revit.

2. Select the air handing unit from Revit which will be updated.

3. The selected air handling unit is opened from the Dim Vent web application. The plugin automatically transfers the updated airflow and pressure drop requirements from the duct connections in Revit to the web application.
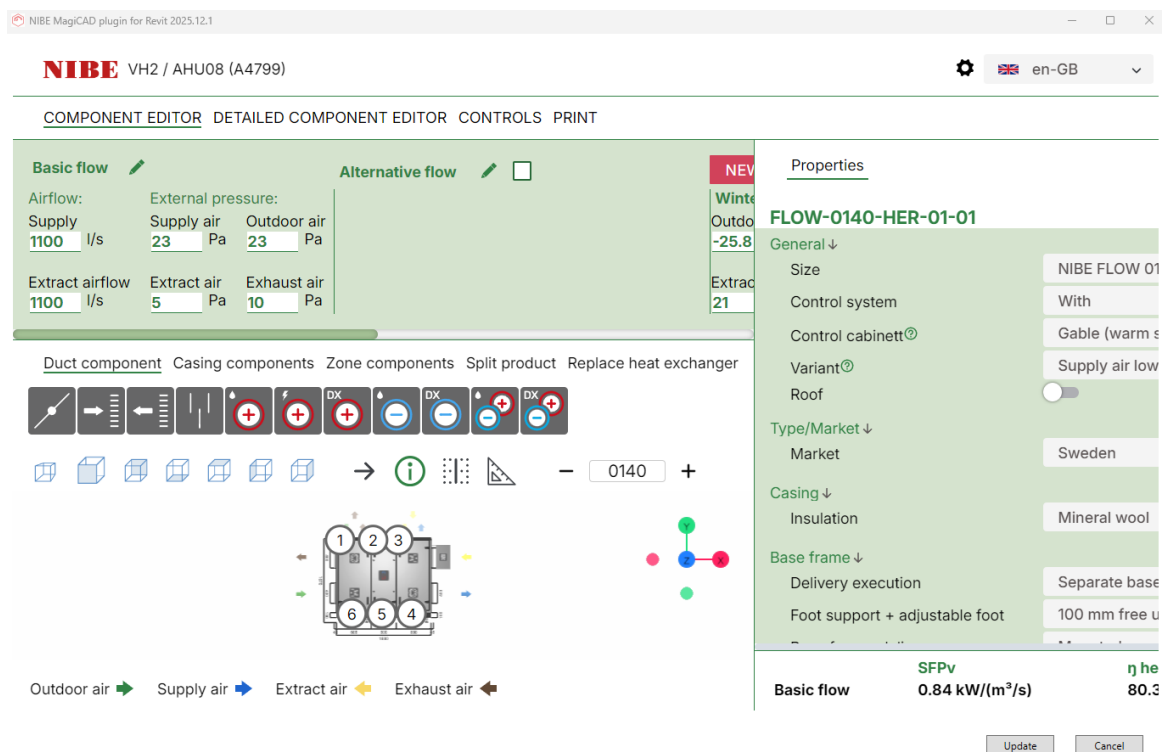
The user can change the predefined air handling unit type or edit unit properties.

4. When the active air handing unit is configured and recalculated, the user can click the *Update* button.

5. The plugin will perform compare operation to validate whether the original air handling unit has been changed to a different kind of air handling unit during the update operation.

    If the air handling unit is the same, only technical data is updated to the existing air handling unit in Revit. In this case, the following message will be shown:

NIBE MagiCAD plugin 2025.1.1

AHU08 succesfully updated.

OK
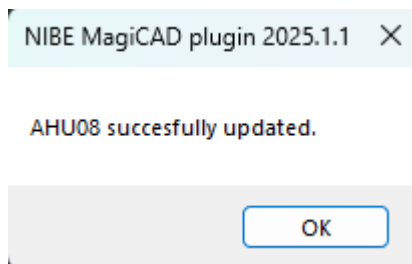
If the air handling unit has been changed to another one, the plugin performs the replacement operation. In this case, the plugin will delete the original air handling unit from Revit, and the plugin places a new air handling unit to the same position with the same system selections. The user is required to connect the air handling unit to the ductwork.

The user will see this dialog:
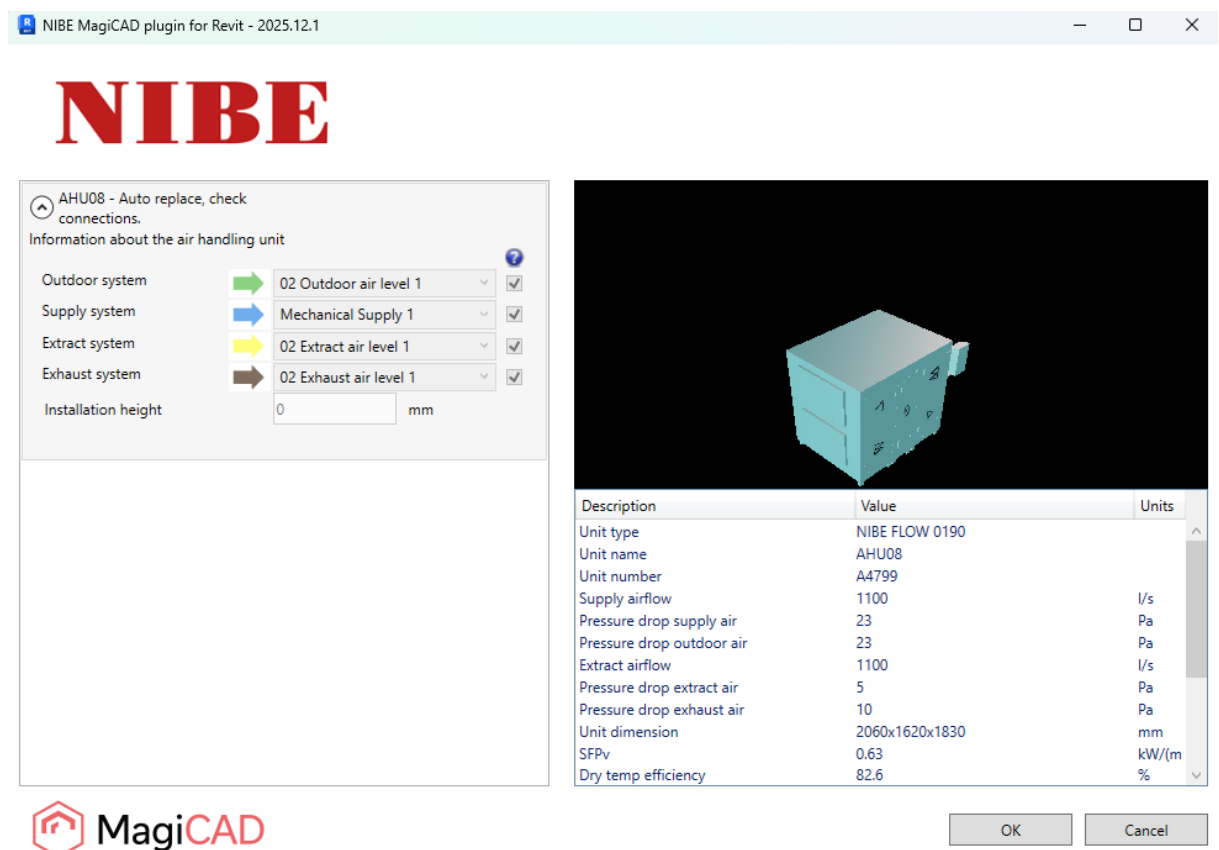
This dialog is only informative, and no actions are required from the user. If the new duct components are added during update, those will be inserted into the Revit at this point.

The user can see from the dialog which systems are automatically selected for the new air handling unit. The user can exit the dialog by clicking *OK* button.

2.5 Validate AHU

Follow these steps to validate a NIBE air handling unit. Please remember that the air handling unit must be connected to the ducts before the validation.

1. Click the *Validate AHU* button from the plugin ribbon panel in Revit.

2. Select the air handling unit from Revit.

3. The plugin shows if validating was successful or if the air handling unit needs to be updated. If updating is needed, the user can continue to update or cancel the validation. The validation checks if the selected air handling unit still meets the requirements of the ductwork (air flow and pressure drop).
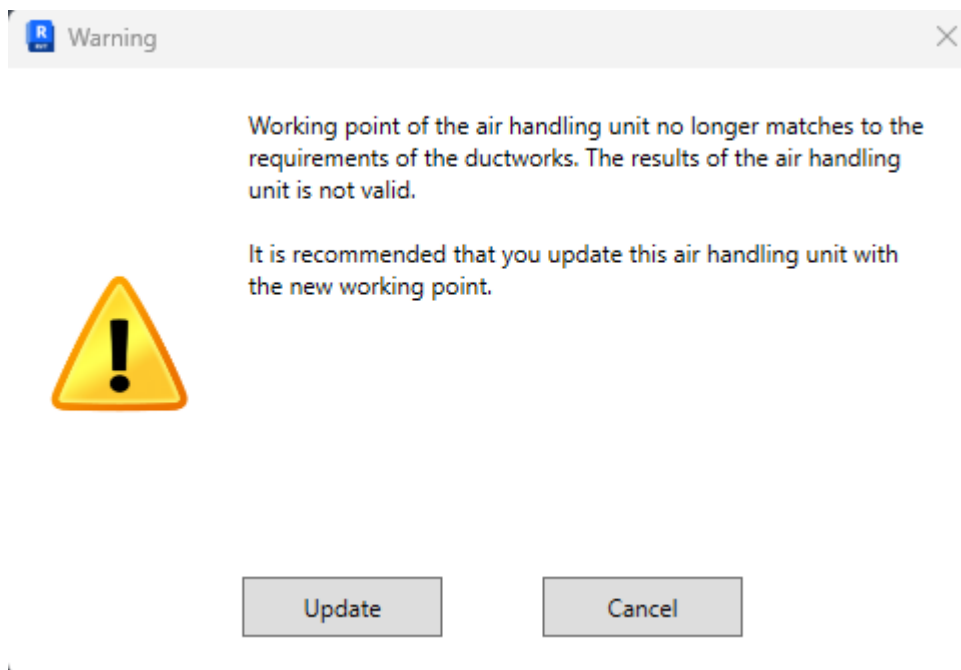
If the *Update* button is clicked from the dialog, the process continues in the same way as in the update feature.