MagiCAD for BricsCAD

Release notes for version 2026 UR-1

14/11/2025

MagiCAD

Content

1   New features

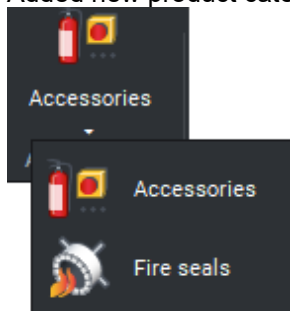## 1.1   Common

Support for BricsCAD V26
MagiCAD now supports BricsCAD V26.

Support for IFC4x3
In accordance with Finnish BIM demands we are now also supporting IFC4x3, alongside IFC2x3 and IFC4.
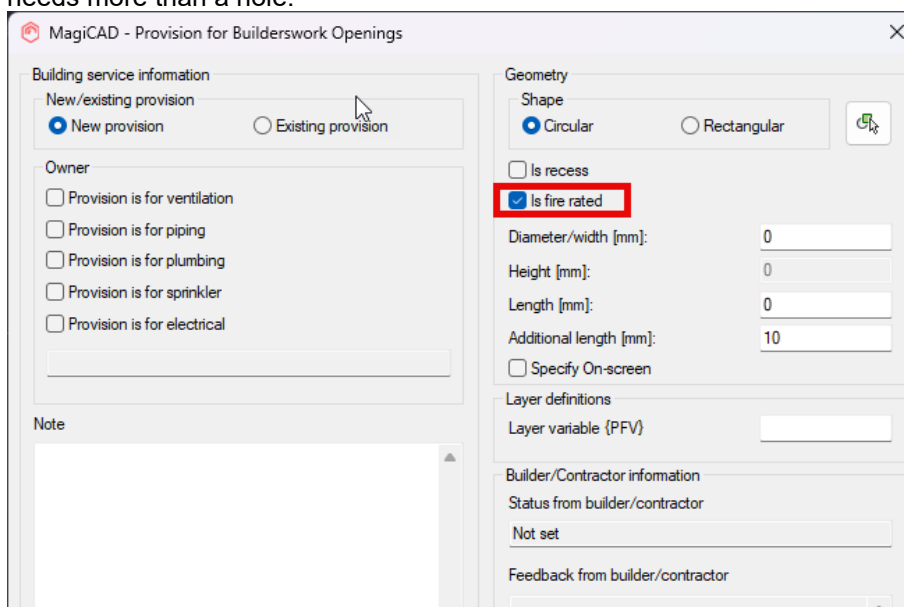
Accessories and simple fire seals have been added as a product class
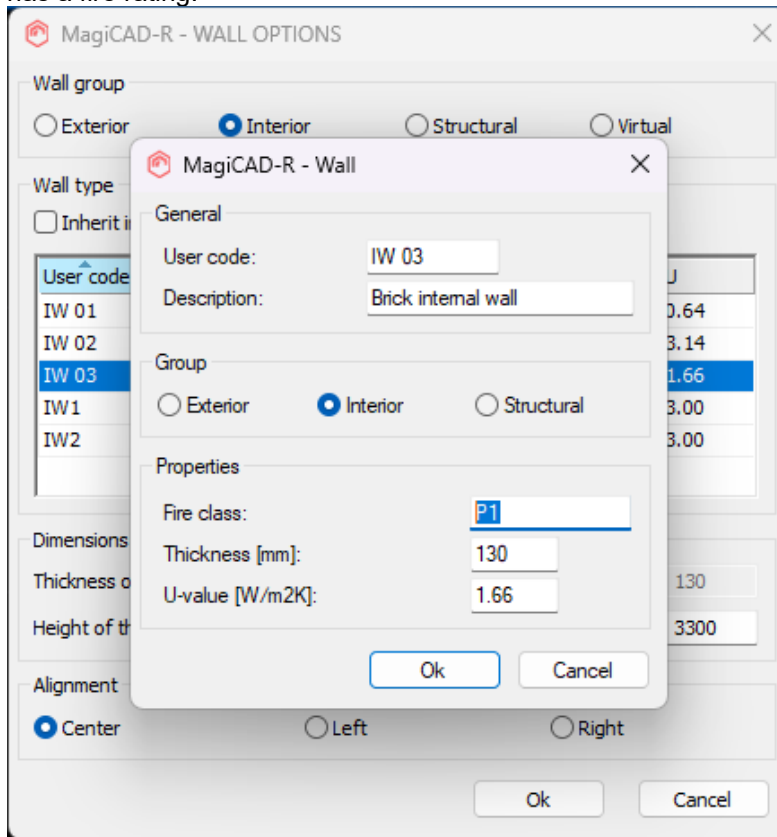Added new product categories for accessories and fire seals.

Fire seal definition for provision for voids
Fire seal rating added to provisions to inform the structural designer and fire seal designer that this needs more than a hole.
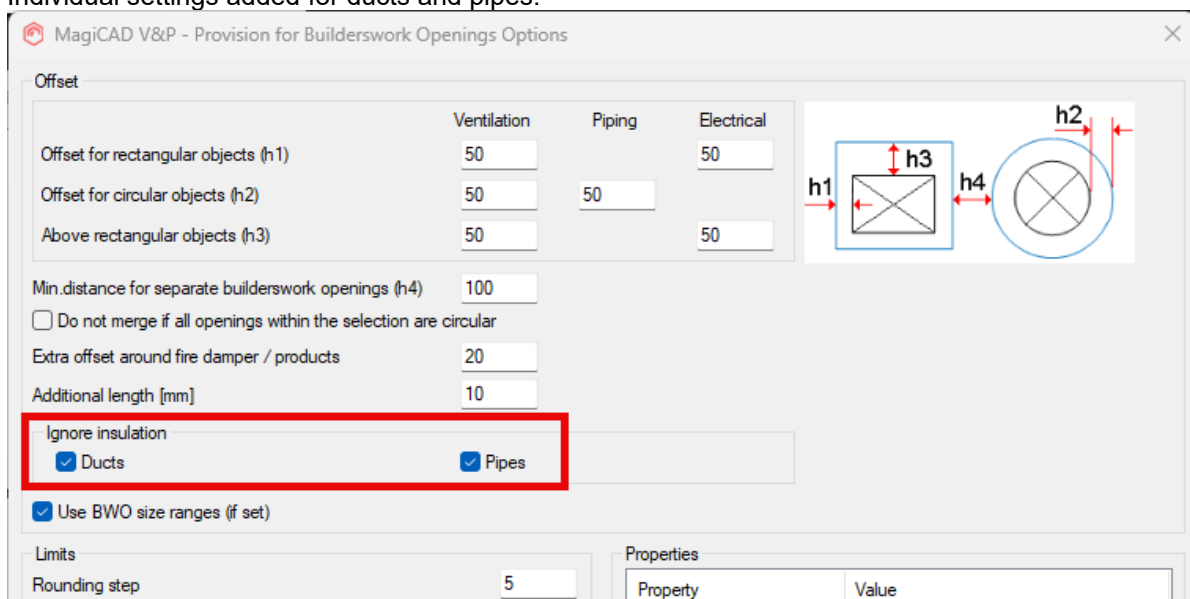
This is also set automatically for Automatic Provisions, if the structure which the segment penetrates has a fire rating:
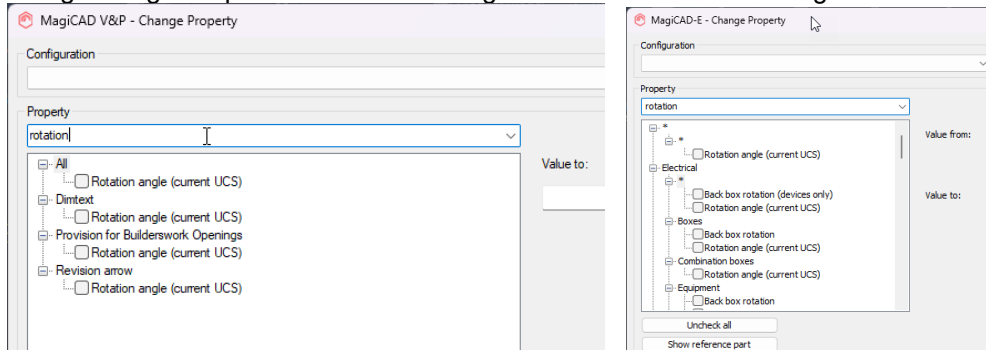

Own "ignore insulation" setting for Duct & Piping to builderswork openings

Individual settings added for ducts and pipes:

Possibility to rotate dimension text according to current UCS

Using Change Properties the rotation angle can now be set according to the current UCS:

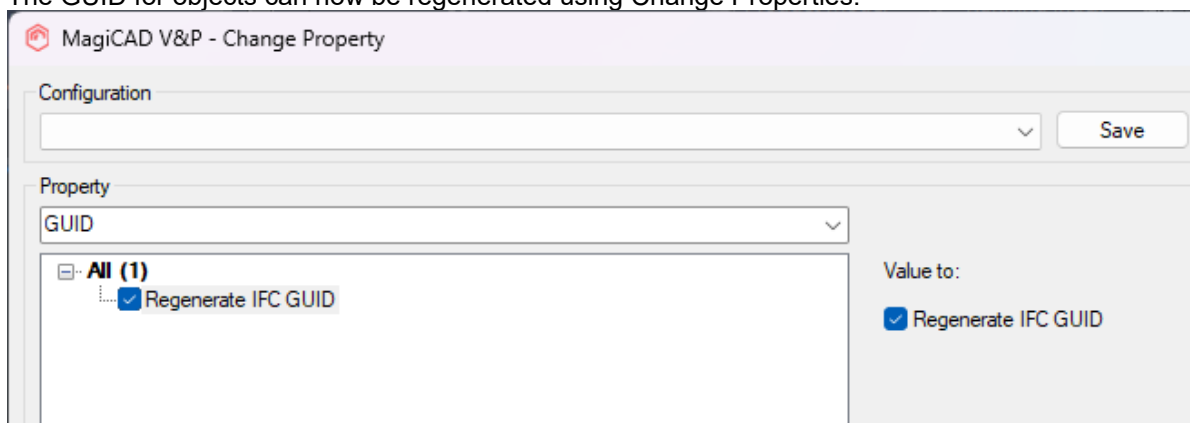**Room zone information**

MagiCAD Room's zone-information is now shown in the devices and can be used as properties in the reporting-functions:
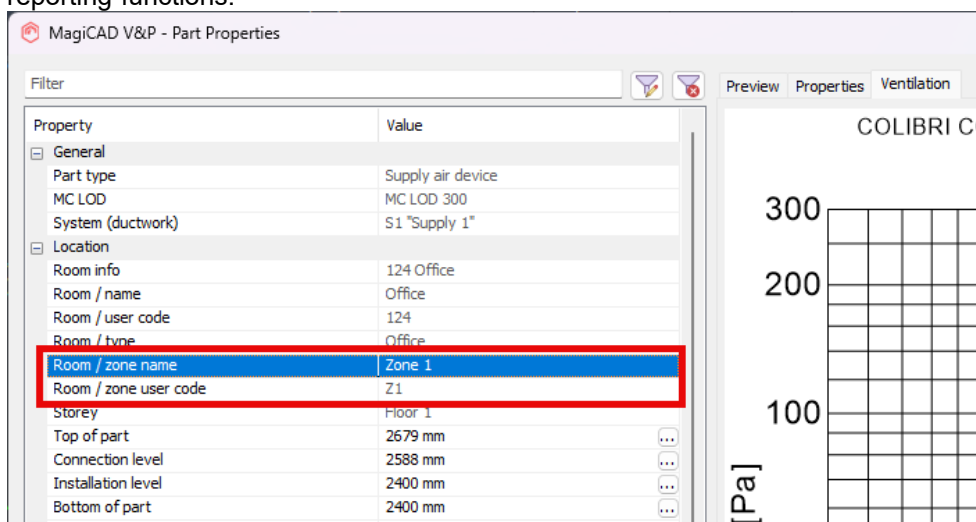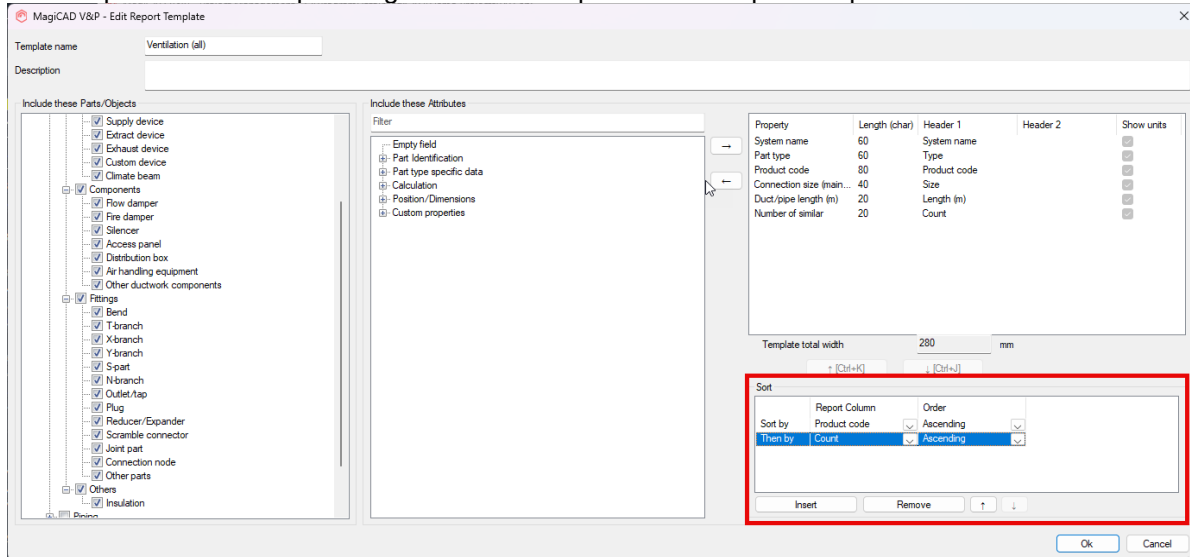

Option to regenerate the IFC GUID of a product with Change properties

The GUID for objects can now be regenerated using Change Properties:

Sorting to report template

It's now possible to set up sorting rules for the reports in the Report templates:

1.2 Ventilation and Piping

<u>Common</u>

Segment drawing dialogs have improved data handling to improve the speed
There were some issues with slowness, especially when drawing multiple pipes. We have now improved how the data is handled by the drawing-functions to improve the speed.

Length of duct and pipe components
Length-property has been added to all the duct and pipe components with 2 opposing connectors:
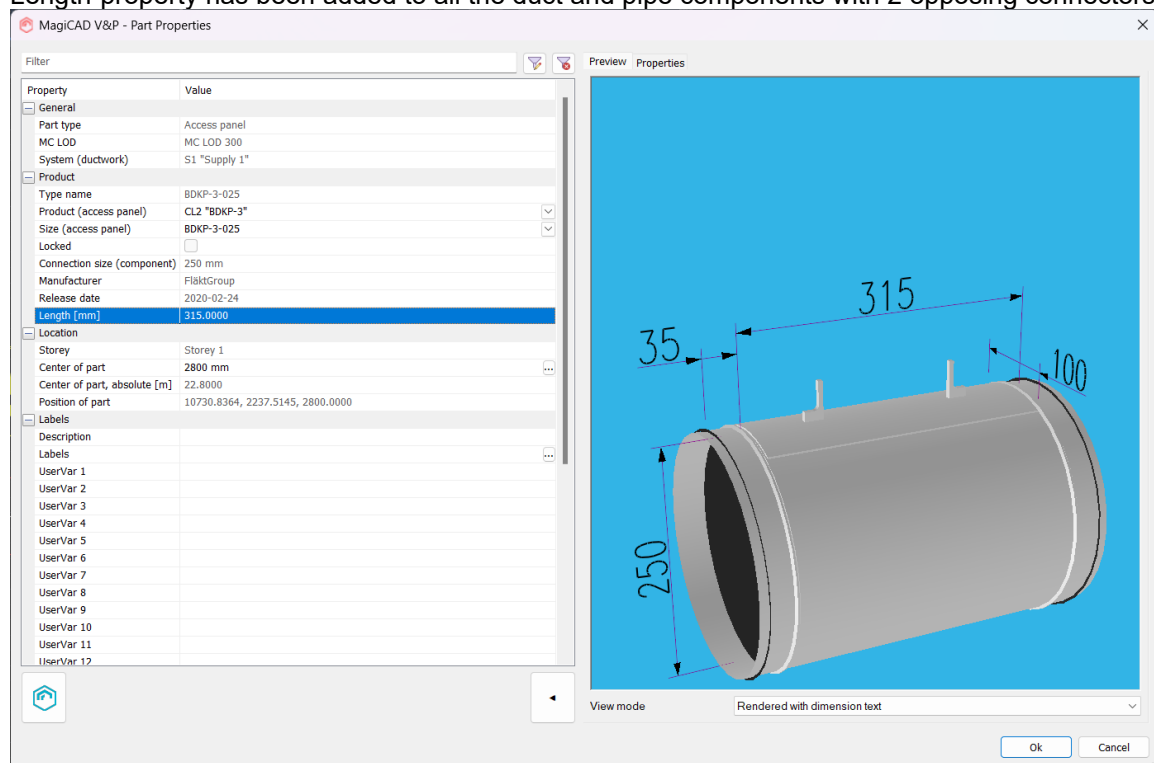
Duct components:
Flow damper
Fire damper
Silencer
Other components
Access panels which are installed with two connectors

Pipe components:
Valves
Other pipe components with two connectors
Drainage components with two connectors

Ventilation

Function for checking flow damper distances
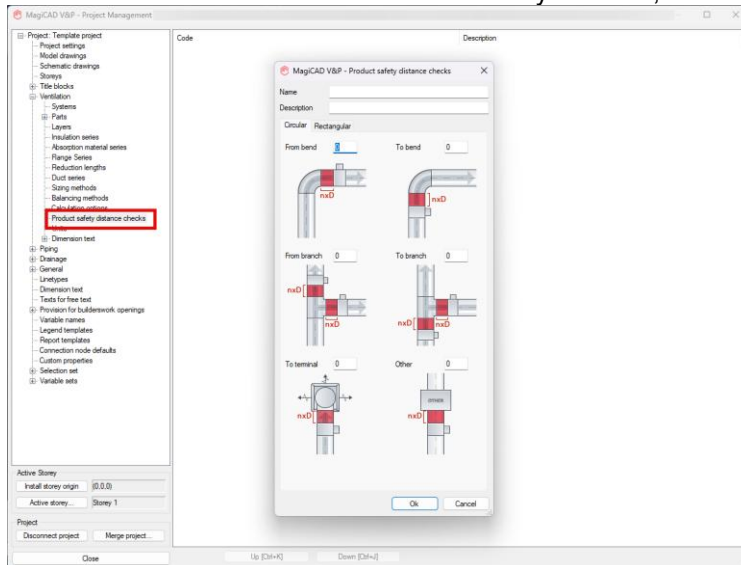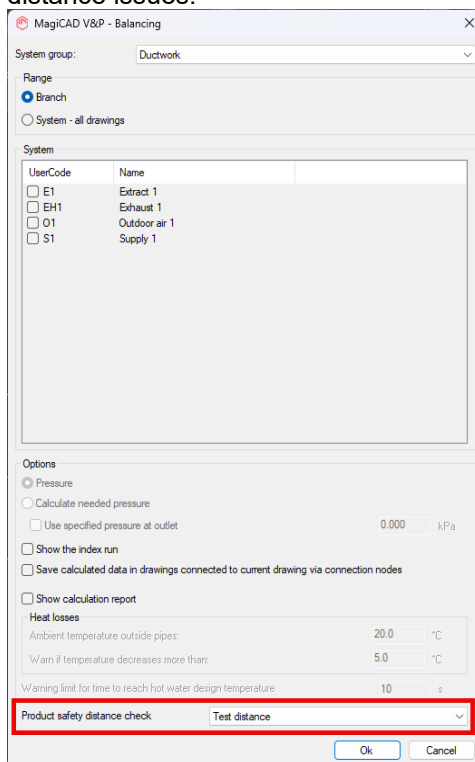It is now possible to set safety distances for duct components.

The distance calculated is the value "n" set by the user, times the diameter of the duct:

This can then be used in the balancing and extended flow analysis functions to check the network for distance issues:

Support for constant flow fans
Support for constant flow fans has been added.
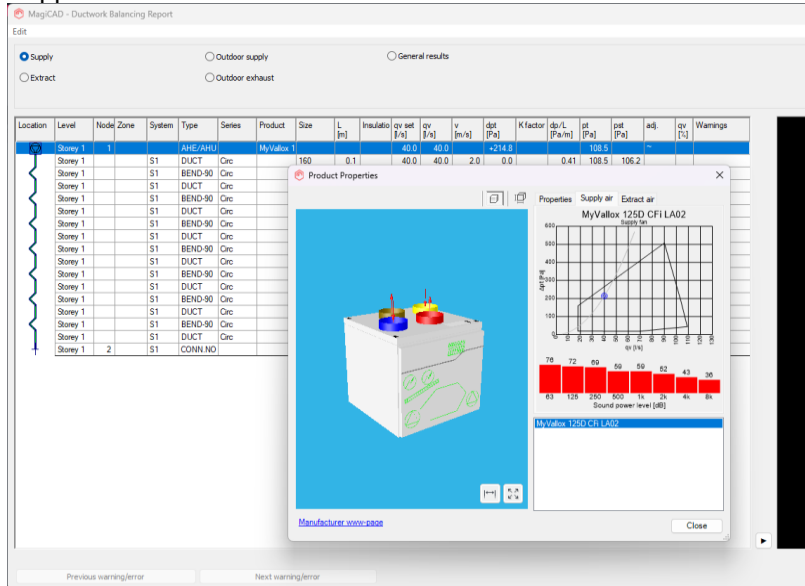
Piping

Calculating circulation flow according to the heat loss per meter.
In addition to standards, MagiCAD allows the user to input a constant value for heat loss per pipe length. This option takes into account the length of all the pipes that have a circulation flow. In parallel branches, temperature drop of the circulation water in each branch is equal

Improved user interface for the Auto-Routing Underfloor Heating

Now when selecting the rooms, from MagiCAD Room, the room object should be selected. This so that it is possible to draw polygons in the room, to split it up, in case it is too big.
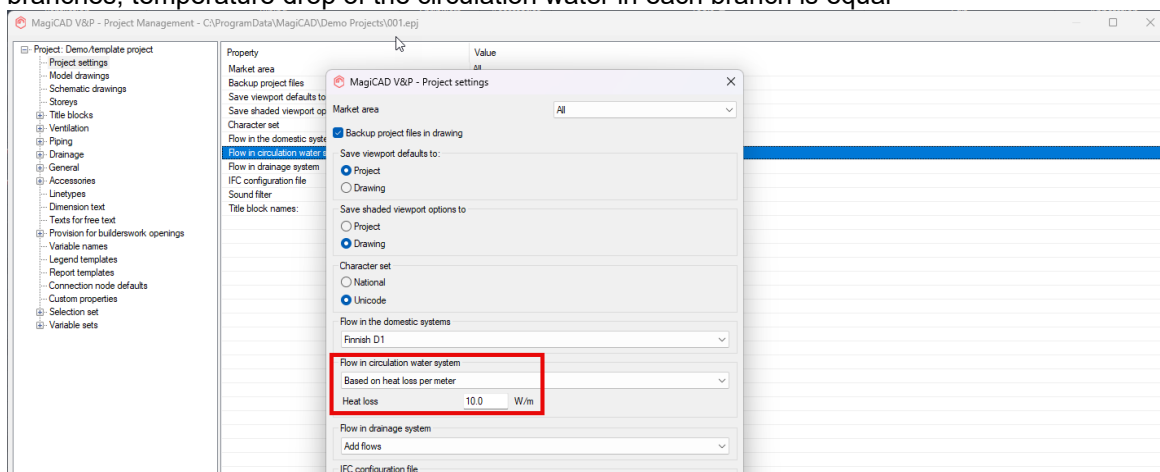
Earlier it did always select the entire room, regardless of where the user clicked, meaning that it was impossible to divide the rooms into sections and add underfloor heating to different parts.

An underfloor heating loop drawn in only part of the lobby:
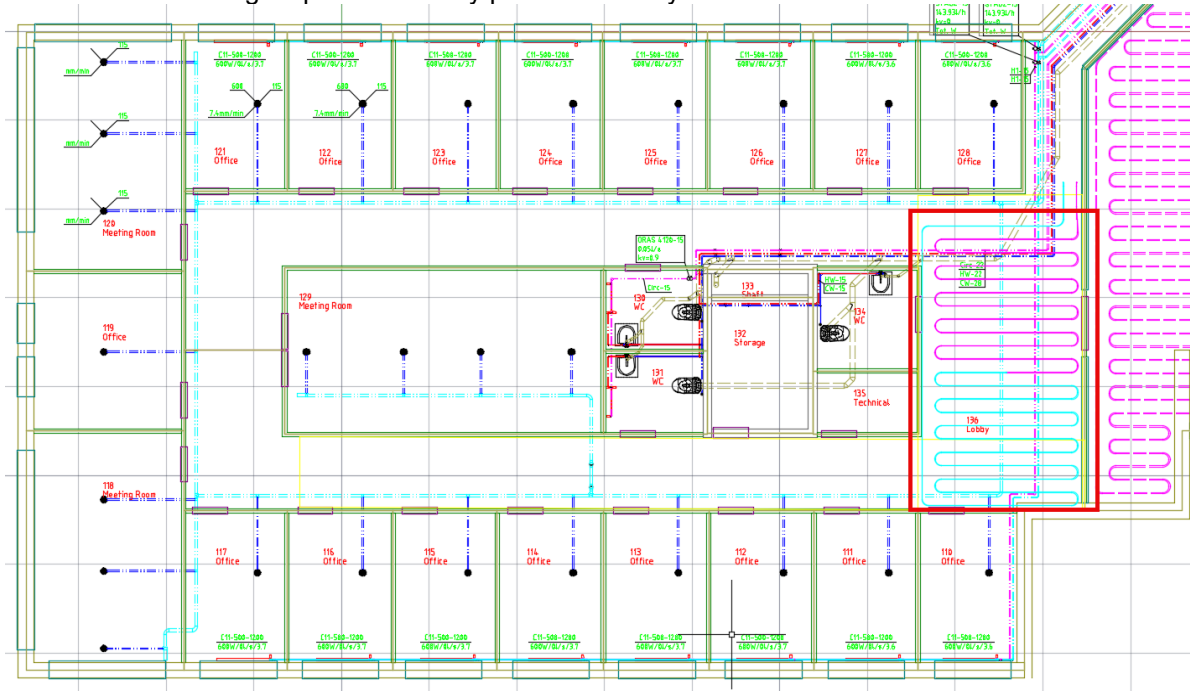
The function does also warn in case there are obstacles and the spiral pattern is selected, as it doesn't take the obstacles into account:
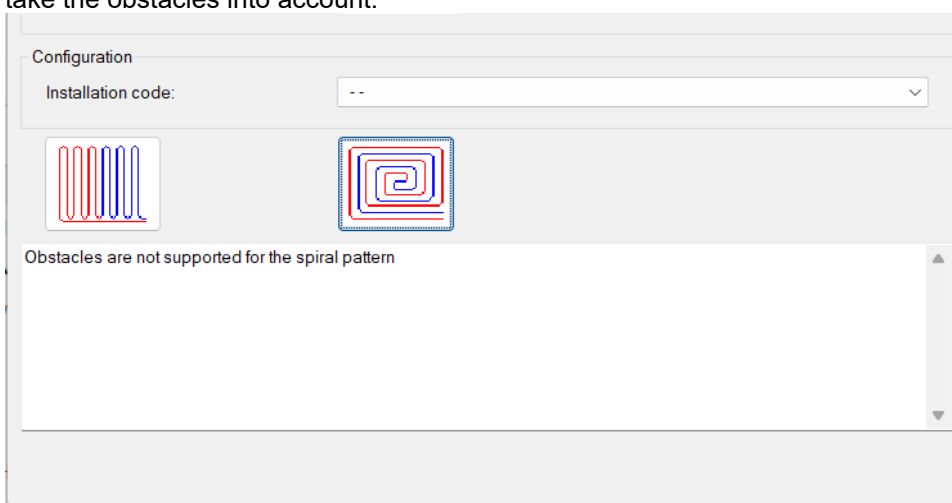
Drainage

Improved variants selection for manhole products
The correct variants weren't selected when selecting another size for manholes. It always imported the first one, even if another size on the list was selected by the user.
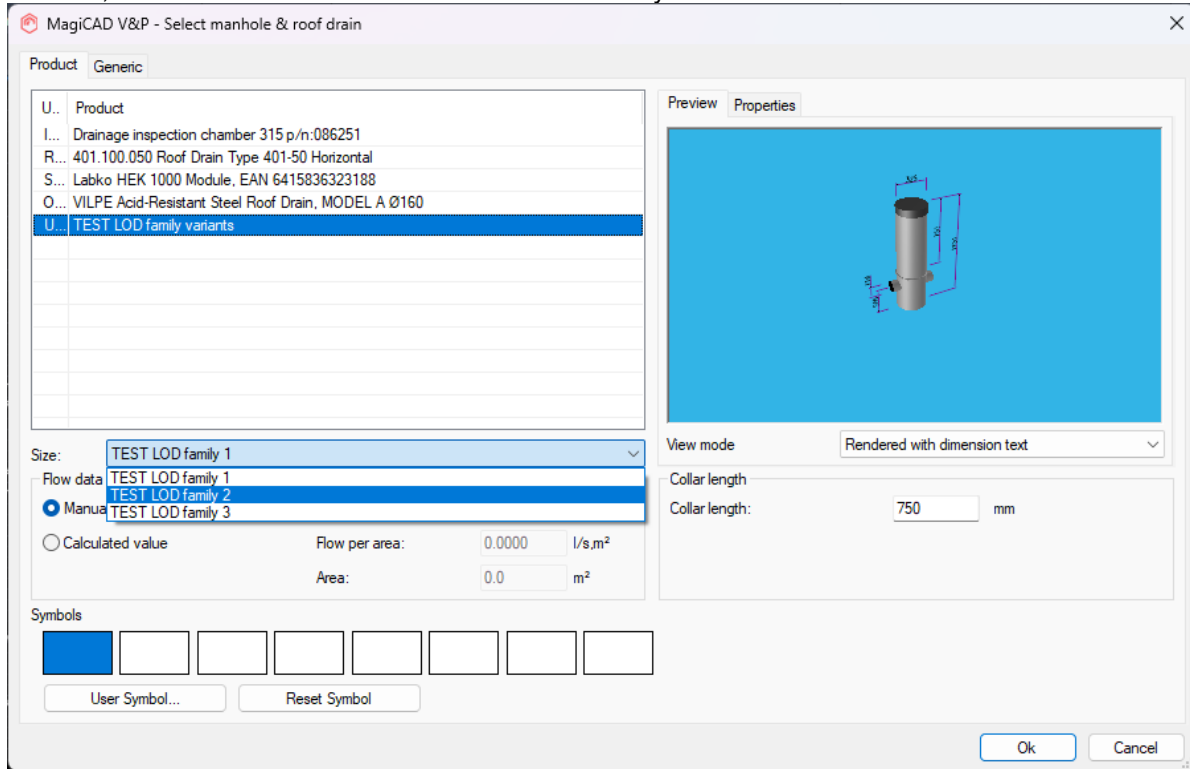
This has now been corrected, and an example below can be seen with the correct ones on top, compared to the wrong ones selected initially before the correction:

1.3 Electrical

New attributes for devices
New attributes have been added for multiple different object types. These new attributes are available in dimension texts, reports and IFC property sets

All devices and also led stripes, busbars and lighting tracks:
Impact Rating (IK)

Luminaires:
Flux (for LED stripes flux is calculated from segment length lm/m)
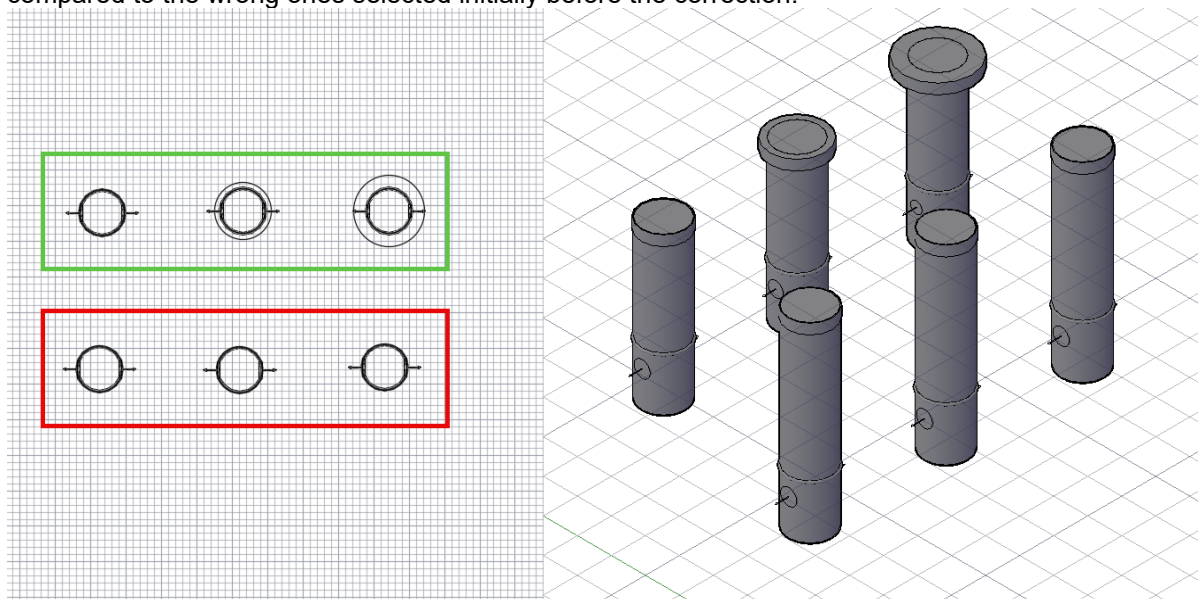Corrected Colour Temperature (CCT)
Lighting Control
Colour Rendering Index (CRI)

Switchboards:
Rated Current [A]
Peak withstand current (Ipk) [kA]
Short time withstand current (Icw) [kA]

Set "owned cables" for packets with Change Properties
It is now possible to define "owned cables" for cable packets using Change Properties. Previously it was only possible to define owned cables via Part Properties of the cable packet, one packet at a time.
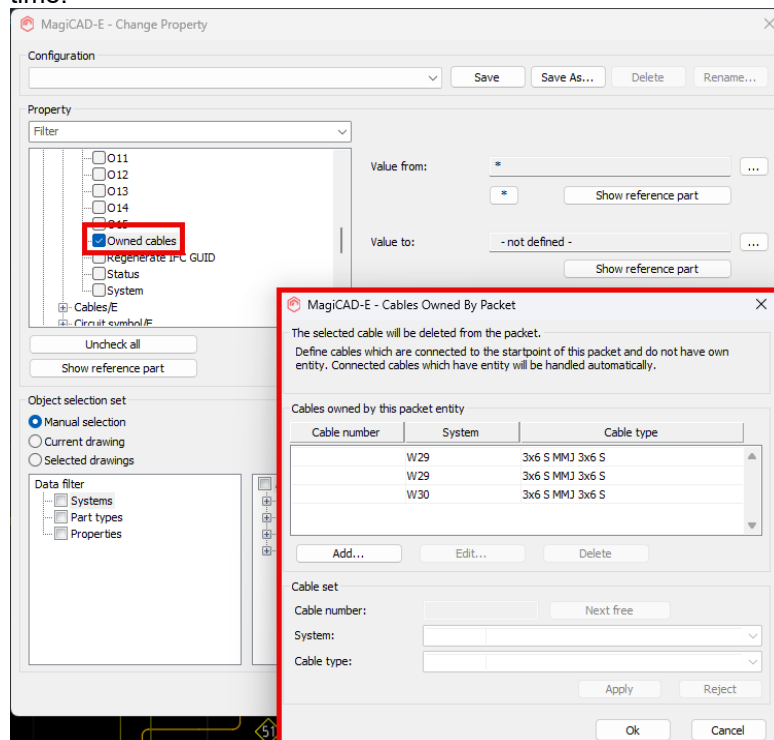
Default status to product defaults

Now you can define default status for a products, cable trays and conduits. Especially useful in renovation projects when you remodel installed devices and they will automatically go to proper status and can be left out from bill of materials.
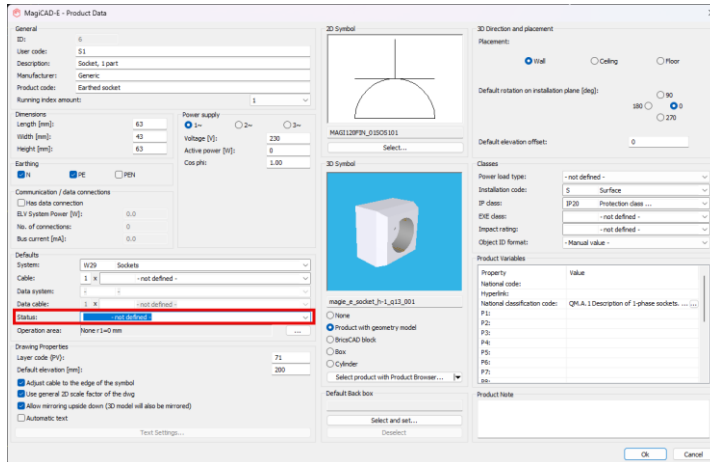
Line weight column added to Layer definitions

In Layer definitions we have added "Line weight" column and column values for that can be changed with "Change column value".

Also "Change column value" function now works as it should with "Transparency" column.

Items in the list can now be sorted on every column.

Symbol manager, possibility to select all and none in MCE

Select symbol dialog now has Select all and Select none buttons.
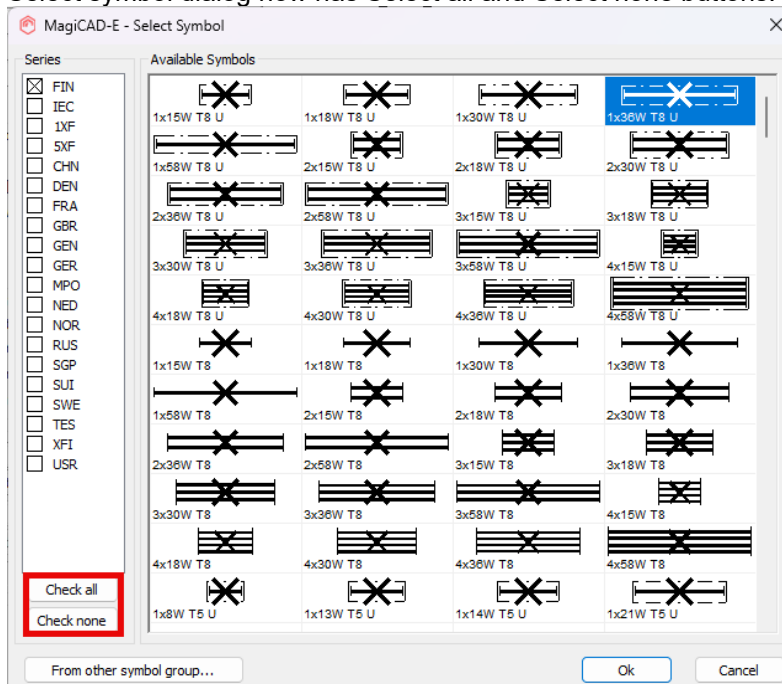
1.4 Circuit Designer

New product properties for objects

Now you can define product information into mother parts and unlinked child units in circuit drawings. That data is also visible in the linked child units.
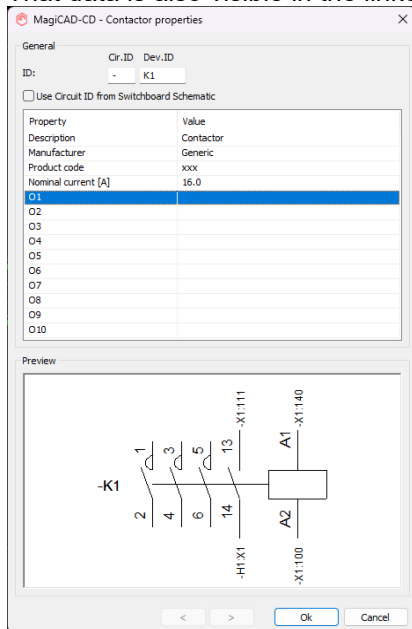
In addition to new product data, text function have been updated. Now you can write text and add property values there.
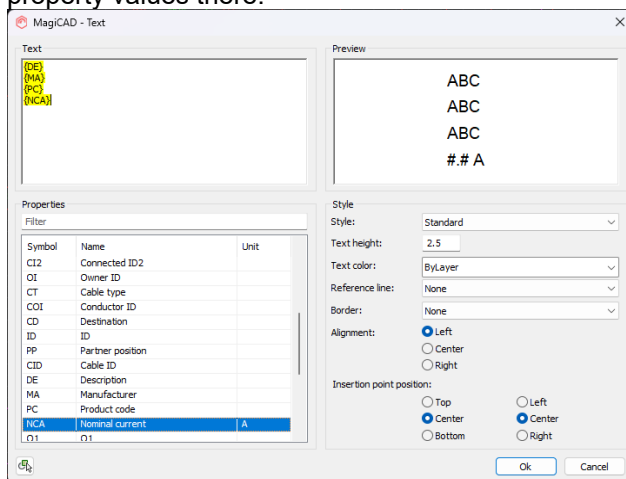
New attributes are modifiable with Part Properties and with Change Properties.

Improvements on performance in large drawings

Circuit design drawings containing a lot of pages (>50) were rather slow when worked on. Now performance of Circuit Designer have been improved and large drawings work much faster.

1.5   Room

Part Properties search circle improvement

If objects are on top of each other in the top view, when selecting objects with Room's Part Properties, a dialog opens like in the other disciplines where the user can select the correct object which was intended to be selected:

1.6   Schematics

Do not create empty rows in the reports

An option has been added so that the empty rows can be removed when the report is created:

2 Resolved issues

2.1 Common

Fatal error during BCFZIP import
Internal error with XML-files caused a crash with some projects. Updates have been made to correct these issues.
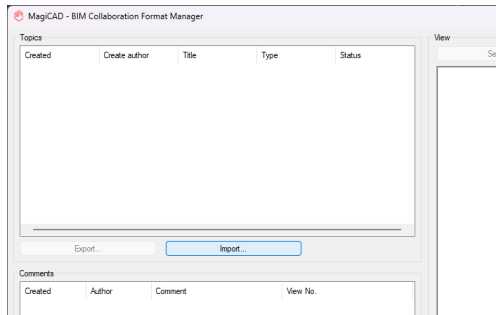
Revision in title block wasn't read from the correct value in the Title Block Report
The description and other information was not read from the defined revision version, but the latest updated revision version.
This has now been corrected so that the revision information is tied to to active revision and not the latest set one.

Running index was not available for custom objects in IFC property sets
Running Index was not available for custom objects created using "Set MagiCAD Data to CAD Objects".

Copying objects crashed in some cases
Corrected an issue where copying objects either took a long time or even caused a crash.

Xrefs sometimes not visible after using side view
Sometimes when entering the side view in MagiCAD for BricsCAD, the XREF wasn't visible and the user had to run REGEN to show it.
This has now been improved so that the information is correctly updated.

Using Project Wizard on Autodesk Construction Cloud
The Project Wizard didn't work with Autodesk Construction Cloud.
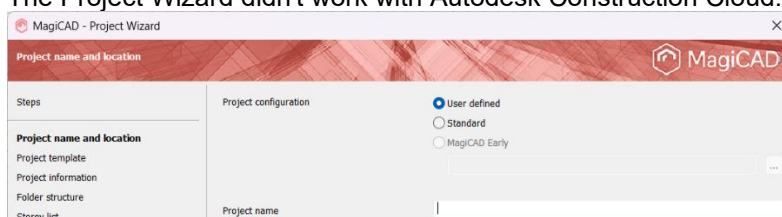
Improved warnings for some conflicts in the IFC Export-
More informative warnings have been added to assist the users in some error-cases.

Crash issue while reading in a damaged IFC file
Both MagiCAD Electrical and Room crashed when damaged IFC files were imported.
Now a message will be displayed about the issue instead of the program crashing.

DWG Export command created dwg-files with the wrong units
When exporting a drawing the newly created drawings didn't always have the same units settings as the original one.

Slow response when marking many object while BricsCAD Properties is visible
Improved the speed of Properties Palette in MagiCAD for BricsCAD.

BCF Manager doesn't capture the correct view if it is in 3D
The BCF Manager didn't capture the correct viewport.

"Export custom properties" issue
"Export custom properties" checkbox was not saved when saving the Selection set for the first time.

2.2   Ventilaion and Piping

Common

Some 2D symbols couldn't be selected
Some symbols couldn't be selected for the devices when they used too much data.
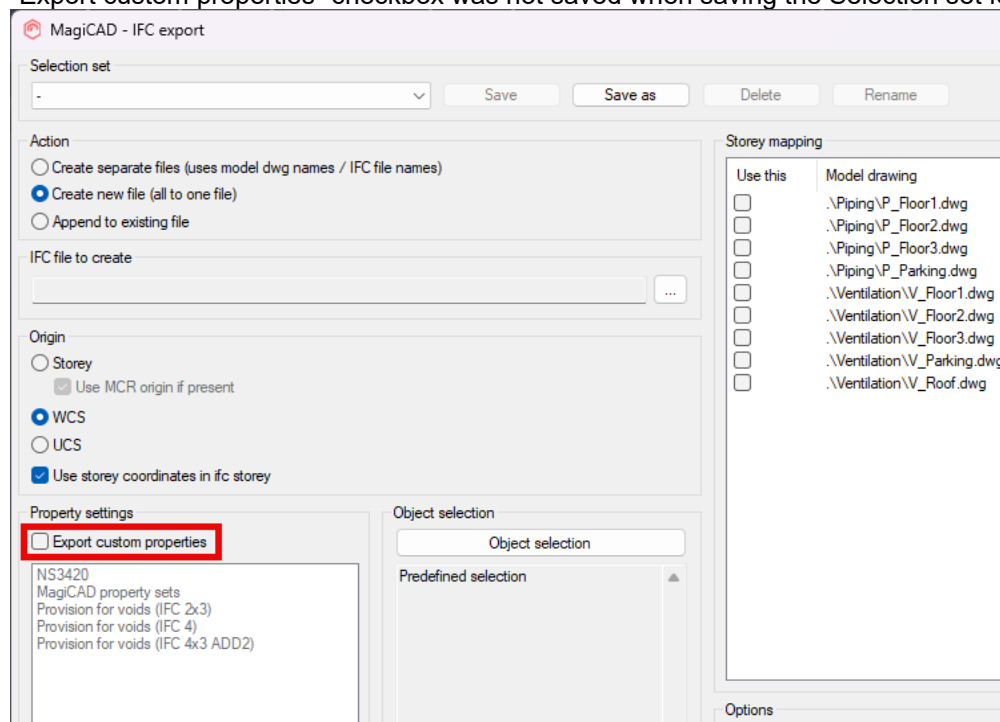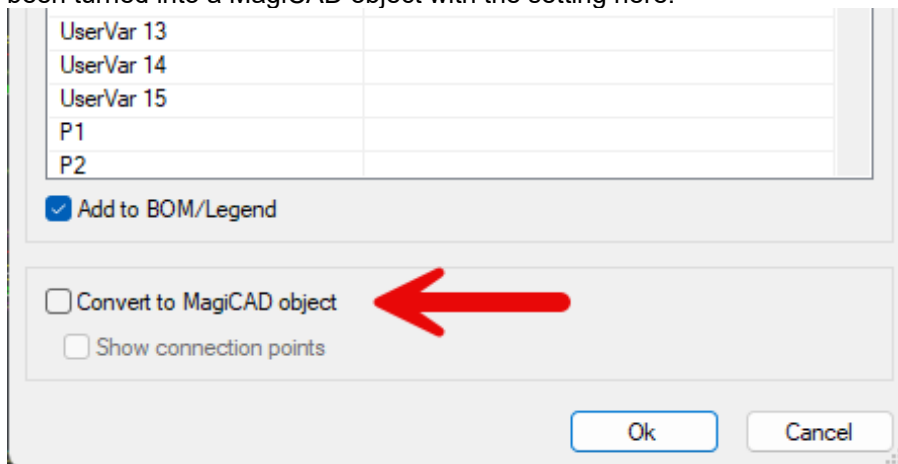This has been improved so that these symbols are saved so that they can be used.

MAGICHK-command removed the dimension text on objects with Magicad Data which were not fully converted into MagiCAD objects
When "Set MagiCAD data to CAD Objects" had been run on a CAD object, but the object had not been turned into a MagiCAD object with the setting here:

Then the object lost its dimension texts each time the MAGICHK-command was run. (the command is used to fix "corrupted" parts of a network)
Now this has been corrected so that it doesn't break for these objects.

Deleting the duct or pipe series in MagiCAD made the program crash and the project couldn't be opened anymore after that
If all duct or pipe series were deleted, then it wasn't possible to open the project.
This has now been corrected so that deleting them all don't cause any issues.

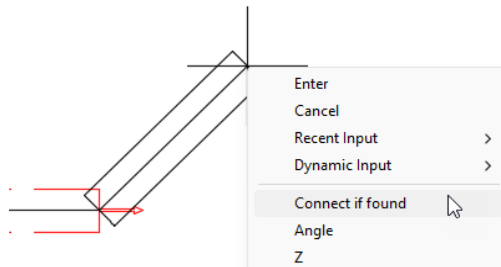**Uservar was not saved to the correct one in "Set MagiCAD Data to CAD Objects"**
Typing a value to for example Uservar4 actually set the value 2 steps higher, to UserVar2, after reopening Properties.
This happened for products using "Set MagiCAD Data to CAD Objects".

Changing multiple P-variables in Project Manager, at the same time, changed the next P-value instead

Trying to, in this case, change the P1-values did instead set the values to the P2-variables:

MagiCAD slowness in Autodesk Construction Cloud
Adjustments made to improve the speed in Autodesk Construction Cloud.

Slowness in drawings with many devices
When using the search circle (set "Connect if found" when right clicking while drawing segments) the drawing could get very slow if there were a lot of objects and devices in it.

Now improvements have been made to reduce the slowness.

Pipe and drainage series manufacturer attribute was not available in the properties palette or IFC pset
The manufacturer information was not correctly updated to the segments and fittings in the pipe series.

Printing all the systems within a single report caused the columns to resize
When printing the calculation results from a single system, the columns kept the width set by the user.
While, if you printed all the systems, the columns were automatically resized.
Now it prints the columns according to the customized width for multiple systems as well.

Project information properties not being updated in the Title Block

The following properties were not updated to the Title Block after edits had been made to them. This has now been corrected so that updating the information works correctly.
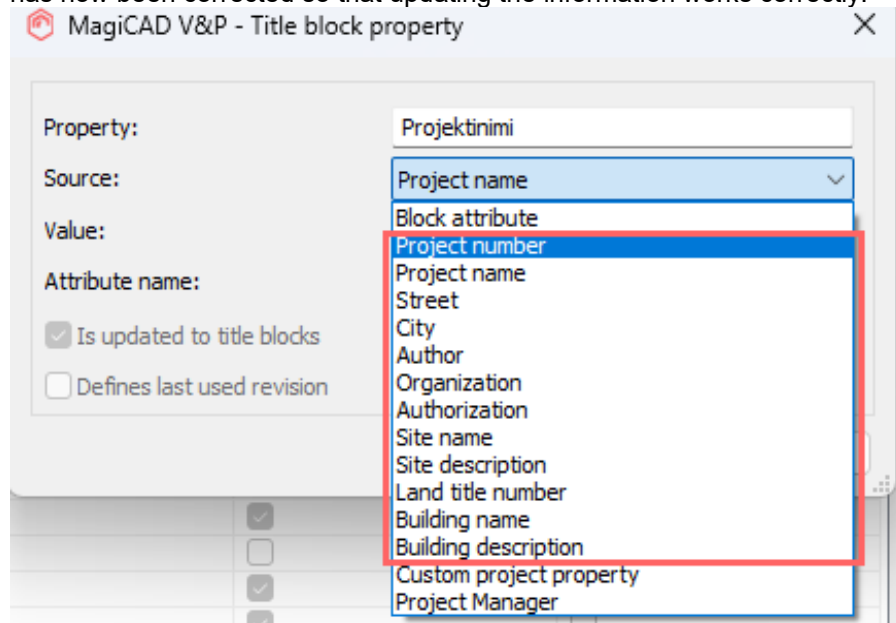
TATE codes for duct and pipe series showed only the drainage series
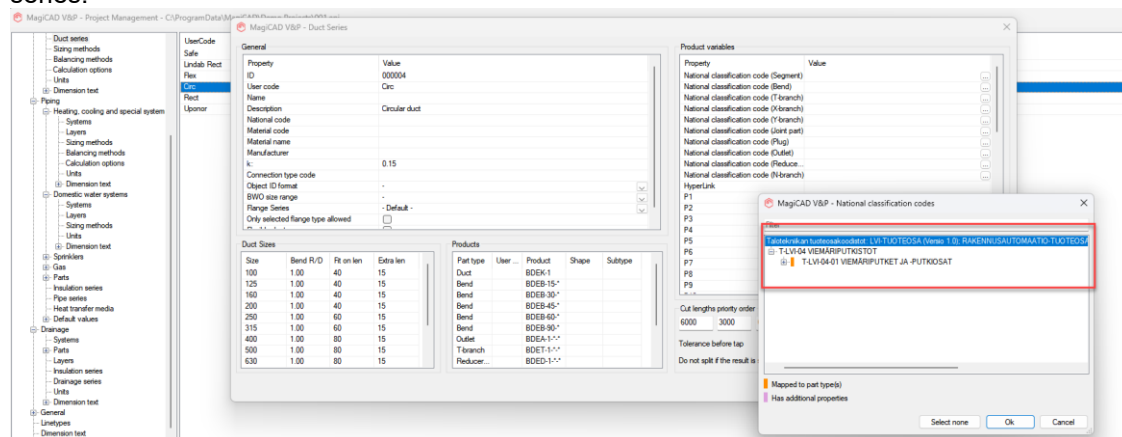
Setting the correct TATE codes for duct and pipe series only showed the codes for the drainage series:


MAGI_GARBAGE layer emptied after using MagiCAD Move command

If something had been deliberately drawn on the MAGI_GARBAGE layer it was all cleared when using the MagiCAD Move-command.

This has been corrected and the layer is only cleared when using the "Clear Garbage Layer"-command.

Colours of the insulations appeared incorrectly in IFC-model

The colours were in some cases set wrong in the IFC which was related to some internal issues with partial insulations:
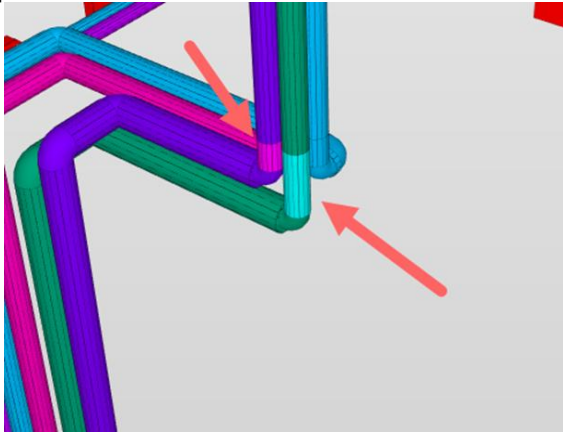
## Clearance zones used a default value instead of the database value

The clearance and maintenance zones didn't have the values which are set in the database, if those were available, but instead default values from the program.

Now the database values are added, if they are available.

Collar length affected some other products although they didn´t have adjustable collars.

The collar length from a previously installed device, where the collar length is adjustable, affected the same value for devices without adjustable collars.

This could lead to conflicts where the value was set but it wasn't possible to edit it:
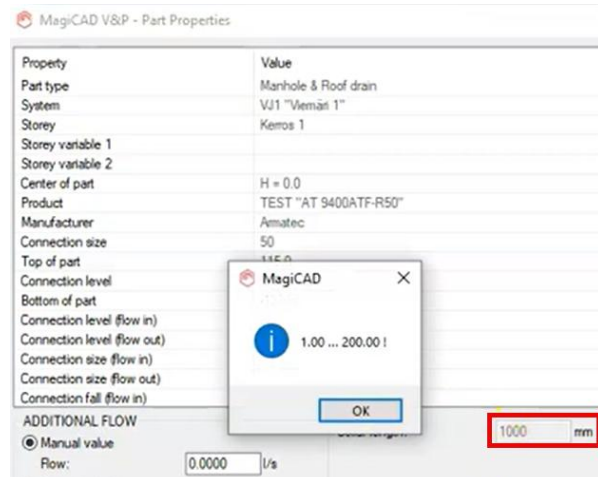

Locked layer caused BOM to not work

If an object is on a locked layer the information can't be correctly collected by MagiCAD and the report isn't created. The issue was that no warning was given in these cases.

Now a warning will be shown if the function doesn't work.

Product dialog showed unexpected characters if the product list was empty

If the product list was empty, hash-characters were shown in the dialog next to the different properties:
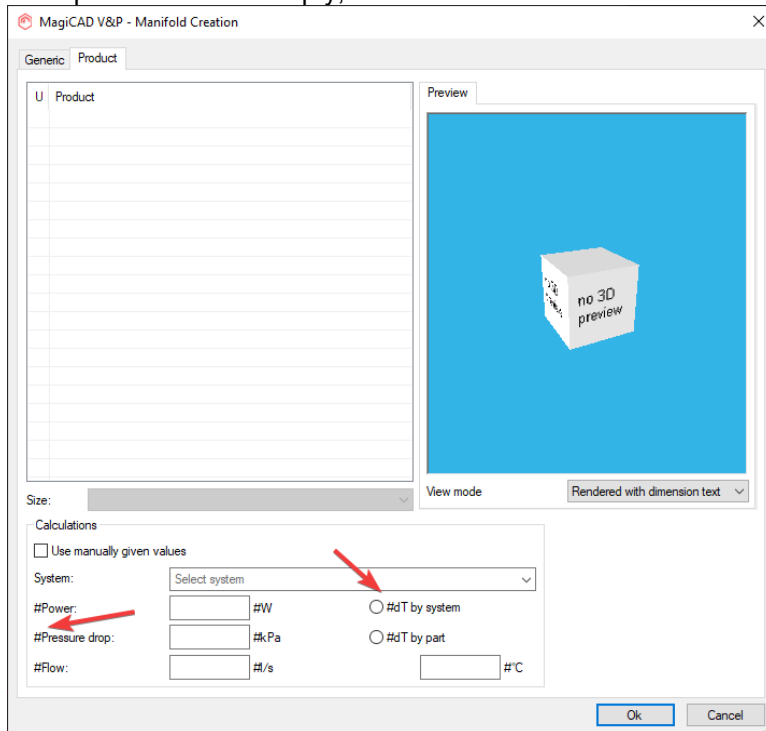
Side Movement - tool was not working properly

The Side Movement had a number of issues since MagiCAD 2025 UR-2 which caused the segments which were moved to bend and break in different ways.

"Insulation"-option not working properly in MagiCAD Object Selection in any function

Now part type "Insulation" in Object Selection selects insulated parts in "MAGISEL" and "Change Properties" commands.
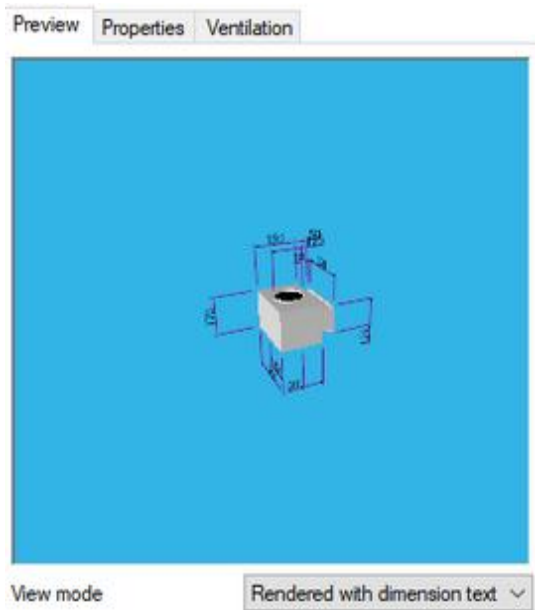
Texts style issue in BricsCAD

When selecting a text Style for the dimension text in MagiCAD for BricsCAD, other styles than "STANDARD" weren't set.

Ventilation

Air terminals were rotated in the preview

Instead of being shown in the default view, the air terminals with different placement options were rotated in the preview.

Now they are only shown with the default rotation.

Adding access cover to the end of duct did not terminate drawing-function
Adding access cover to the end of a duct did not end the drawing ducts command like it should have. Drawing could be continued from the access cover which lead to strange results.
Now the duct drawing command is correctly ended when installing the access cover to the end of a duct, while drawing ducts.

Duct components could be set to too large versions to actually fit, using the new part properties dialog
It was possible to change the duct component to a too big one, which overlapped a nearby fitting or device, using the new Part Properties dialogs.

Duct fittings with IFC export from MagiCAD got the wrong type name/name
Due to how the mapping of information was done, the "Type name" of fittings were set in the wrong way in the IFC.

Sound calculation failed if the system included a product without pressure curve
When running Sound Calculation of all routes and the calculated system includes air device which didn`t have pressure data, the calculation failed and gave a warning.
Now sound calculation doesn't fail if system includes product without pressure curve.

Piping

Radiator sizes were wrong after selecting new radiator to the project

When selecting a new radiator to the project, the installation dialog did initially show the wrong sizes, those of a previously selected radiator, instead of the sizes of the recently added one.
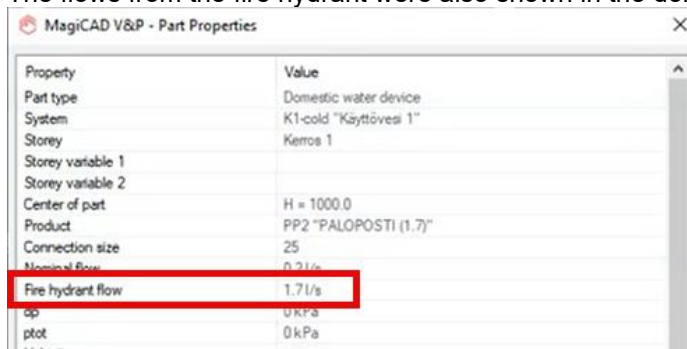The user had to restart the dialog to see the correct sizes.

This has now been corrected so that the sizes and other fields are updated when the radiator is added:
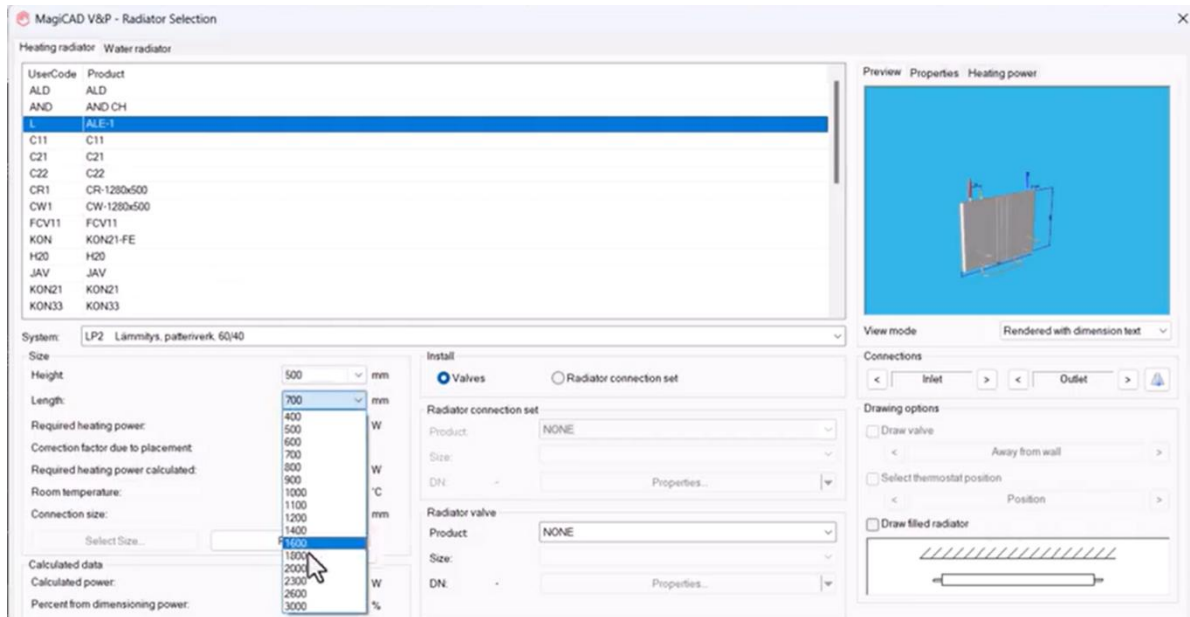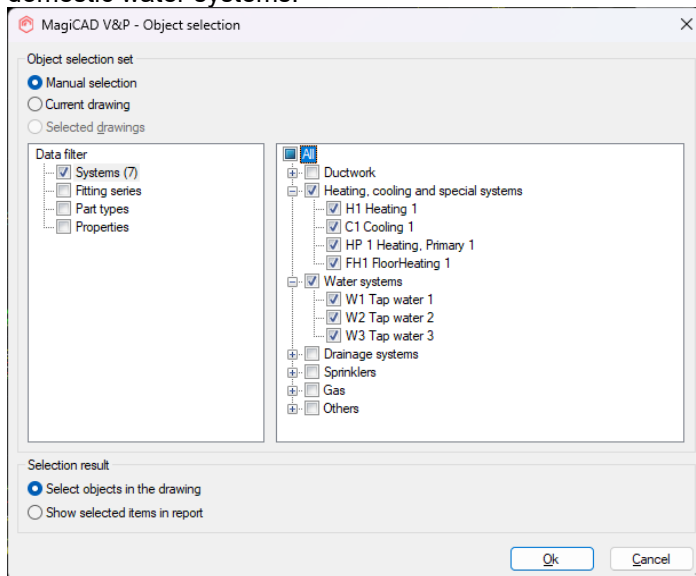

Domestic water devices inherits Fire hydrant properties

The flows from the fire hydrant were also shown in the domestic water device:
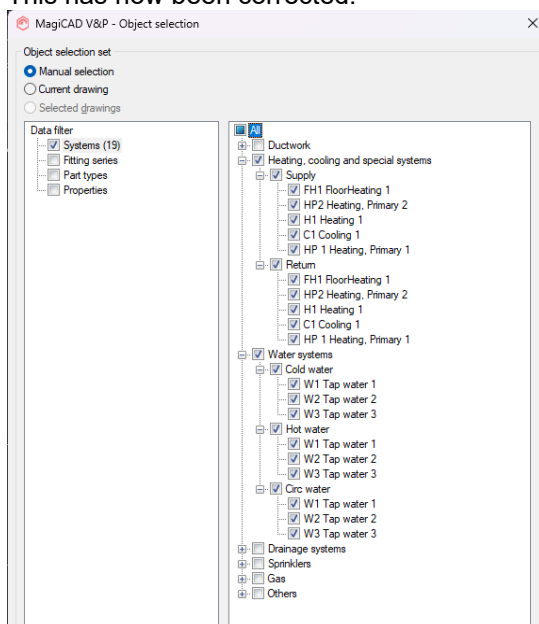
Object selection sub-systems issue

Since 2024 MR it wasn't possible to select the sub-systems individually for the heating/cooling and domestic water systems:

This has now been corrected:

Note that this issue was no longer visible in 2025 UR-2, due to internal updates to the code, but has now been officially tested and verified.

Simultaneity% was missing from new Part Properties

The Simultaneity-property was missing from the pipe segments in new Part Properties.

Angled valve couldn't be installed into bend

In some cases it wasn't possible to install angled component to a bend, even if it should have been possible.

This was due to internal data and has now been corrected.

Crash after changing pressure or flow values to Mixing Unit

Changing either of these, after installing a mixing unit, led to the program crashing:
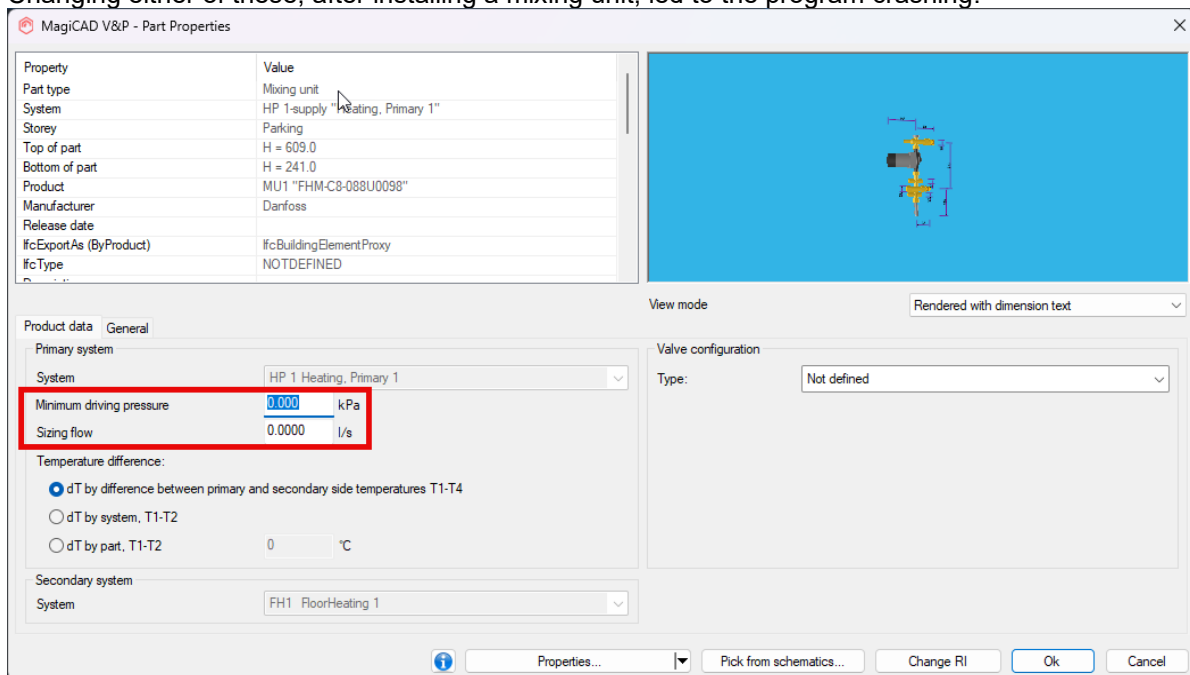
Zone valves in a manifold did not follow the balancing method

Manifold zone valves did not follow the set minimum pressure drop defined in the balancing method. Instead min dp is 4 kPa was used regardless of the set value.

Valves in Heating Systems now use the minimum pressure from the Balancing Method in calculations

Drainage
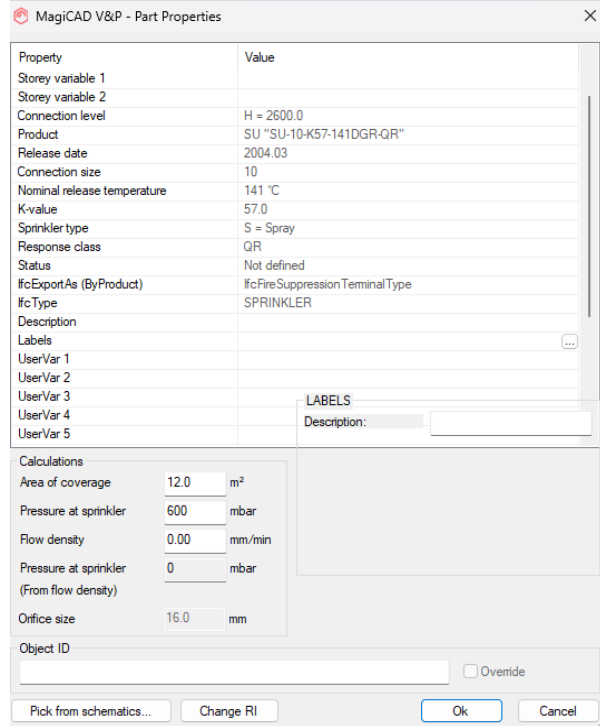
Drainage series was created as a pipe series

The drainage pipe series was saved by the program to the pipe series list instead of the drainage series list.

Now the drainage series is saved correctly to the drainage series list.

Sprinkler

Resizing windows breaks dialog

Resizing broke the old part properties dialogs for sprinklers:

2.3 Electrical

Wipeout frame with symbol scale factor

When symbol scale factor was used to make 2D symbols bigger, wipeout frame of those scaled symbols were also scaled making them very large.

Now wipeout frame is created based on the size of the 2D symbol and scale factor no longer affects the wipeout frame.

MagiCAD Freeze layers does not unfreeze the layers

When viewport had "2D wireframe" visual style, Freeze Layers tool didn't freeze layers correctly.

Now also viewports with "2D wireframe" have their layers updated correctly

Creating new RI format from copy takes a lot of time

When creating new RI formats from a copy took quite a lot of time in a big project.

Creating new RI format from a copy is now optimized and it works very fast.

Saving group after editing asks V&P project

After editing an object group and pressing "Save" button, MagiCAD asks for a V&P project.

This has been corrected and it no longer asks for the V&P project.

Objects created automatically in object groups create problems

When editing Object group and something is added in the middle of a cable, cable tray or conduit which splits the segment in two, other segment were left out of the group.

Now both segments are automatically added to the object group.

National classification codes of cables are linked to inactive NCC

When changing National classification code to another, references to cables and combination boxes were not reseted.

LED-stripe showing question mark as product

Incorrect Product property value removed from part properties of LED stripes

Rotate in place tool rotates cable with tickmark

When trying to rotate a tickmark of a cable with Rotate in place function, it also rotated the cable.

Now only the tickmark is rotated.

Height calculation issues with CAD block as 3D symbol
Height calculation calculated height level wrong with devices which has CAD block as 3D symbol if storey origin in dwg and in building was moved.
Now height is calculated correctly.

Issues when connecting to some elements belonging to a group
It was possible to connect cable in the middle of a cable which belonged to a group. It caused problems in the group.
Now it is not possible to connect cable in the middle of a another cable which belongs to a group.
Also it is not anymore possible to connect cable route/busbar/lighting track/LED-stripe to any object which is already in a group.
When connecting a conduit to the end of a conduit which is already in a group, will create a separate conduit.
While editing a group, it is not possible to add objects from another group into the group.

Legend template disappear
Creating legend templates in a project in MagiCAD 2025 UR-2 or 2026 MR and opening project with 2025 UR-2 or 2026 MR all legend templates that were created to the project disappeared.
The issue was that the Legend templates of the new style were not read correctly from database.

Conduit length not updating correctly
After opening Part Properties of conduit, cable or cable packet, MagiCAD locked the "length" attribute to the current value and stretching the object didn't change the length value before Part Properties was re-opened.
Now Length attribute is updated correctly then stretching conduit, cable or cable packet.

New/copy of selected resets product note data
When using "New/copy of selected" function in the project to create a new product, Note field was not updated with the data of the new product, value from the copied object were left there.
Now it updates Note field with the data of the new product.

Some converted objects don't show properties in properties palette
Properties palette didn't show on CAD objects converted to busbars, lighting tracks or combiboxes.
Now it is shown correctly.

Connections to Master DWG fix after static code analysis
Fixed a bug in code. Nothing should be changed how the function works.

Connections to Mechanical power nodes cannot be edited with Part Properties
Power nodes created by Connections to Mechanical could be opened with Part Properties but pressing OK didn't close the dialogue.
This has now been corrected and Part Properties can be used to modify power nodes again.
Communications/data connection nodes have been working all the time.

Operational area data does not come from database to product in MCE
When adding a product from MagiCAD Cloud and it had operational area defined to the product, it didn't come to product data inside MagiCAD.
This has been fixed and now operational area is defined to the product correctly.

Cannot import Dialux Evo 13.1 luminaires from IFC
Dialux is using newer IFC version in Dialux Evo 13.1 and so importing IFC file from Dialux to MagiCAD failed. Dialux Import have been corrected with newer IFC mapping and now the import works again.

2.4   Room

Virtual walls incorrectly included in Room`s thermal bridge calculations
Virtual walls were incorrectly included in the total length of the walls.

Fatal error while importing some IFC files to MagiCAD Room
A crash occurred in certain cases when some spaces couldn't be imported, in this case spaces with very detailed borders. Now those spaces are ignored if they have over 1000 border points:
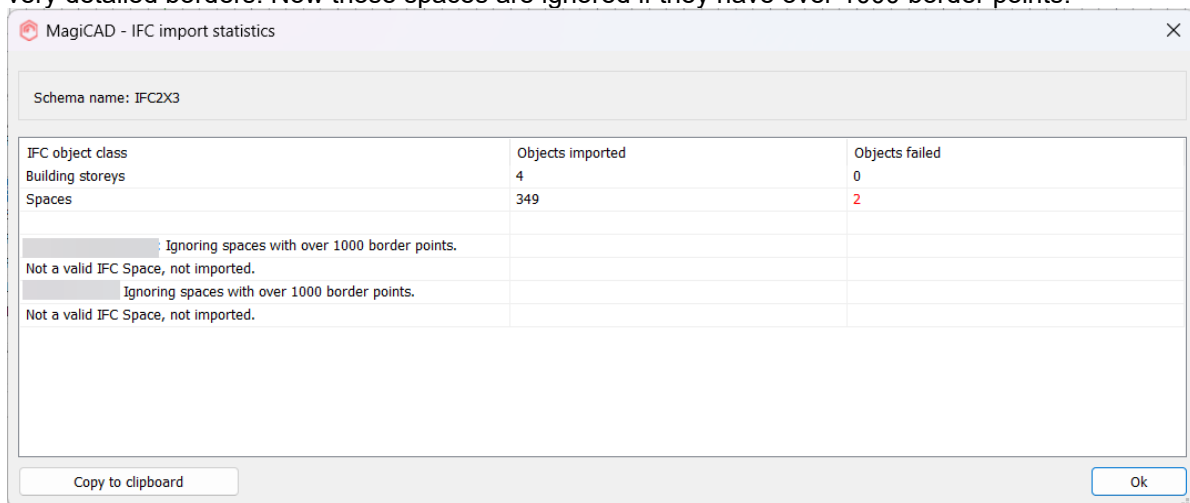
Room IFC import issue
The rooms were in some cases in a disorder when imported from IFC-files.
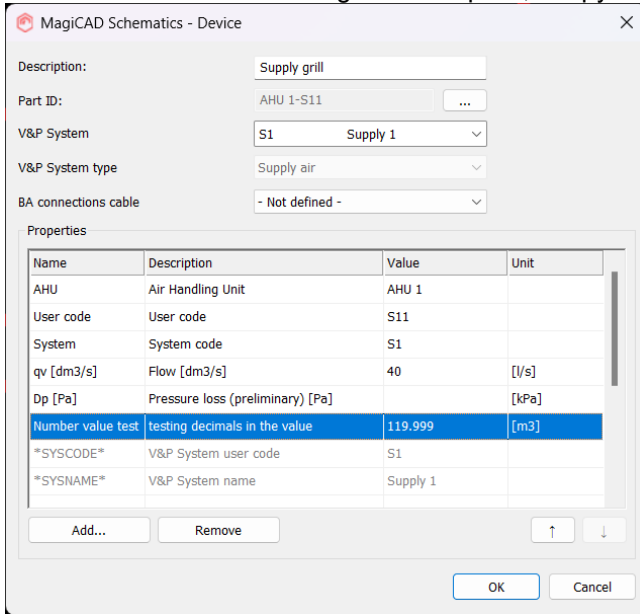
We have now improved the handling of the data to reduce the number of such issues.

2.5 Schematics

Decimal value incorrectly rounded to show no decimals

Values were rounded to integers in "Report", "Copy to Clipboard" and "Device schedule":

Example:

Now the value is shown according to what is set in the property.