MagiCAD for Revit

Release notes for version 2027

20/05/2026

MagiCAD

Content

1 New features

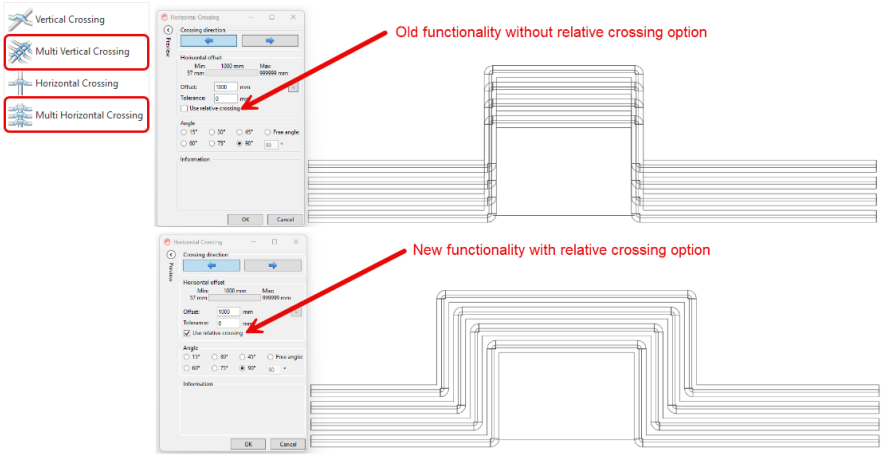
1.1 Common

Support for Revit 2027
MagiCAD now supports Revit 2027 and two previous versions.

New MagiCAD API version
Latest MagiCAD API now includes IFC export functions for creating fully automated export process without UI interferences.

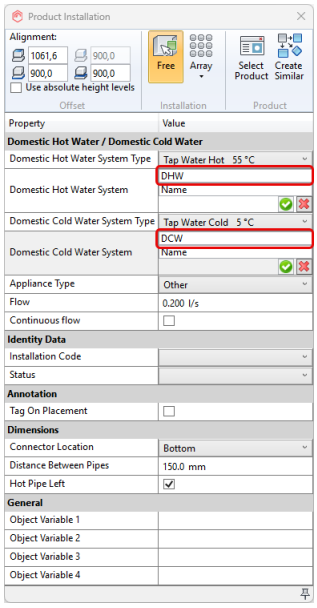
Project Wizard collaboration
Worksets can now be created and managed in the MagiCAD Project Wizard tool already as part of the project setup process. Using pre-defined worksets enables fast and consistent setup of worksharing projects.

Improvement to Multi Crossing
Multi Vertical Crossing and Multi Horizontal Crossing tools now supports relative distances between the segments.



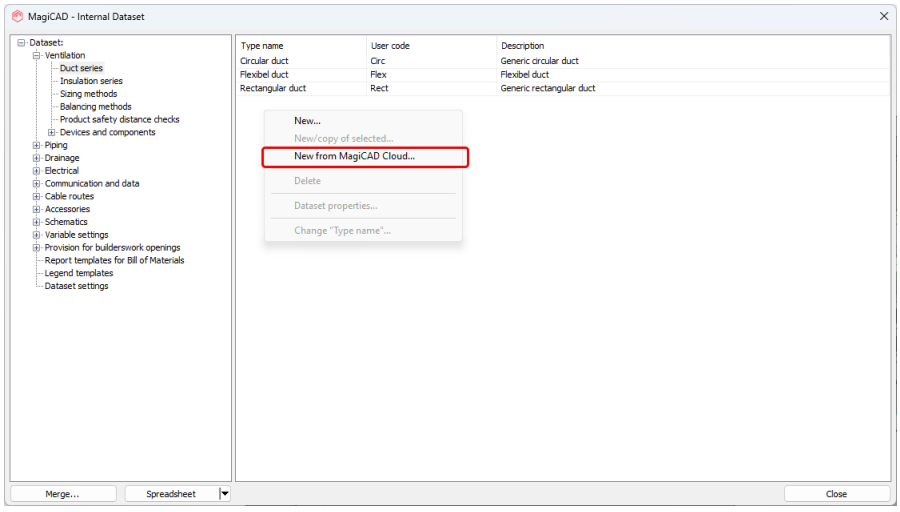
Default system code for system type

Default system code can be now set in System Type Manager. It will be used as default when new system is being created in product installation dialog. Default System Code will be written into "MC System Code" parameter when the new system is created.



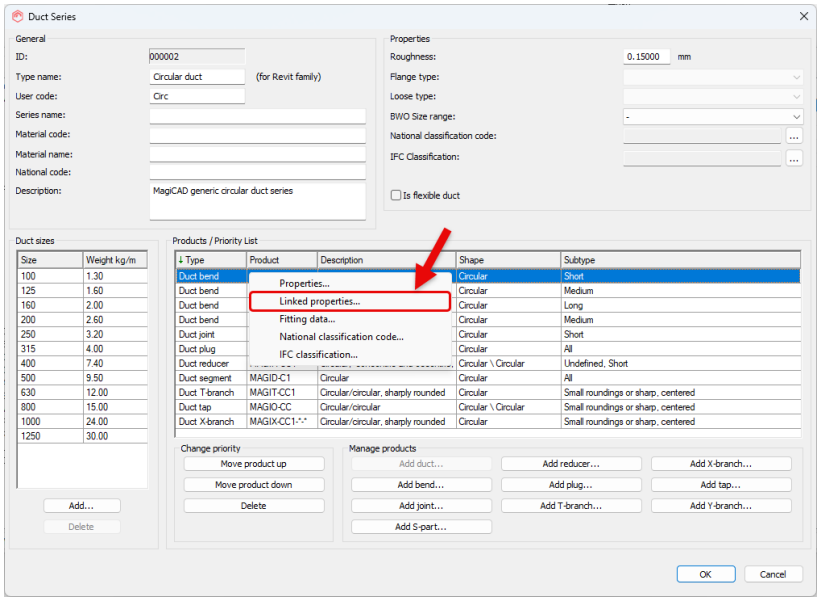
Support for adding duct, cable tray and conduit series to the dataset via MagiCAD Cloud

It is now possible to add readymade duct, cable tray and conduit series to the dataset from MagiCAD Cloud.



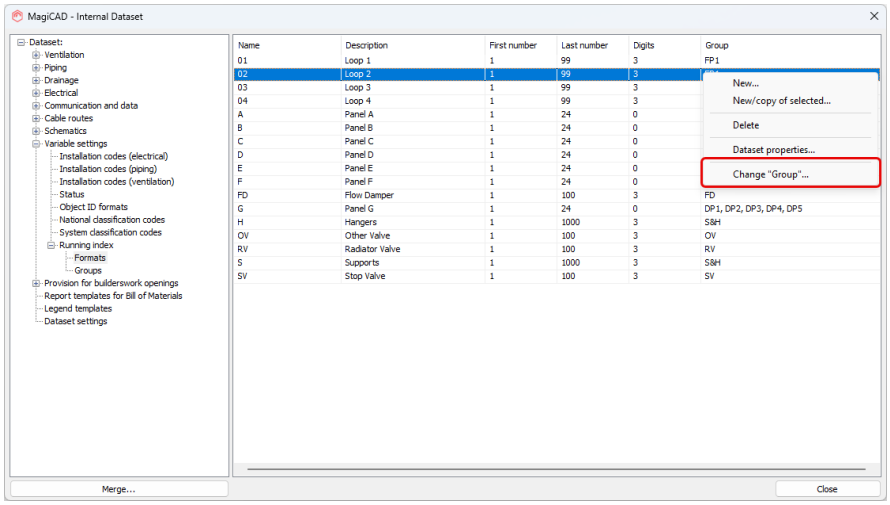
Cloud properties with dataset segment series

Cloud properties (Linked properties) can now be opened for segments and fittings in the dataset series definition dialog.



Change "Group" selection is now functional

Dataset running index formats group couldn't be changed by right clicking the list and then by selecting change group. Now the selection will work.



Allow read only parameters in dataset additional properties

User-modifiable shared parameters can now be used with Additional Properties even when their value is set to false.

Ability to select if all electrical systems are exported as IfcDistributionSystem

Now all systems are IfcDistributionSystems in IFC4 and IFC4x3, IfcDistributionCircuits are not used.

Improvements to IFC export
IFC4x3:
IfcBuidingStorey: Elevation syntax change. Not visible for the user
IFC-file header change: FILE_DESCRIPTION is now written as expected in IFC4x3

IFC2x3:
Provision for void texts change: PROVISIONFORVOID text is now written as ProvisionForVoid to ObjectType-attribute.

1.2 Ventilation and Piping

Default duct and pipe series selection for systems
System type manager has been improved with default segment series setting. This gives an alternative solution for dynamic selection defining the default series for the systems. When default series has been selected, draw options and or starting to draw from a connector with system information will automatically use the selected default series.

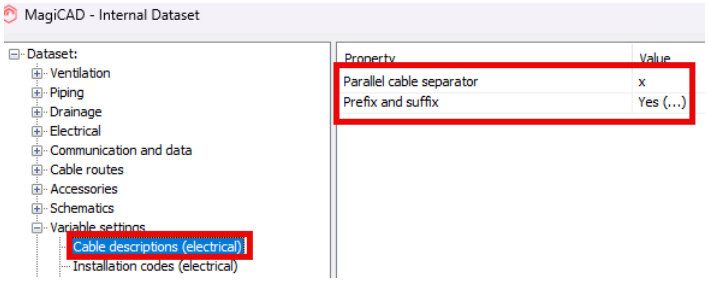
Heating & Cooling Plant with manufacturer pressure loss data
The system specific pressure drops defined for *Heating & Cooling Plant* are now used in calculations when the product supports system specific pressure drop data. This allows, for example, different secondary heating systems to have different pressure drop values. If selected *Heating & Cooling Plant* product has pressure drop information defined in the product data, then that pressure drop information will be used. This may be in scenarios if pressure drop information has been given for generic product in MagiCAD Create or if manufacturer product has the pressure drop information. In other words, if the pressure drop information can be found from the product data, then pressure drop values displayed in product installation dialog are not used.

Product installation method for valves and other components, direct connection
New smart installation method "*Direct connection*" is now introduced, where products can be installed from connector to a connector and the product size is automatically sized according to the connector size, which makes it easier to attach valves or create pump and valve groups.

1.3 Electrical

Update Cable Descriptions into circuits and/or wires
Cable Descriptions can now be updated into circuits and wires using Update Parameters.
Depending on you cable composition, if it is a wire type family (weight not defined) or specific size (weight defined) and if you have multiple parallel cables you will get slightly different kind of Cable description.

In the dataset, you can define parallel cable separator and prefix and/or suffix in case of multiple parallel cables.



Rules how Cable Descriptions are defined:

PRODUCTS (weight defined)

When MC Number of Cables > 1 (so 2 or more):
When wire type is multi-core product (included PE) =>
<number of cables><separator><prefix><wire type><suffix>

When wire type is multi-core product (separate PE) =>
<number of cables><separator><prefix><wire type>“ + “<PE wire type><suffix>

When wire type is single-core/insulated product (included PE) =>
<number of cables><separator><prefix><phase amount>“x”<wire type>“ + “<neutral amount>“x”<wire type>" P:"<PE amount>“x”<PE size><suffix>

When wire type is single-core/insulated product (separate PE) =>
<number of cables><separator><prefix><phase amount>“x”<wire type>“ + “<neutral amount>“x”<wire type>“ + “<PE amount>“x”<PE wire type><suffix>

When MC Number of Cables < 2 (so 1 or 0 or parameter not found):
When wire type is multi-core product (included PE) =>
<wire type>

When wire type is multi-core product (separate PE) =>
<wire type>“ + “<PE wire type>

When wire type is single-core/insulated product (included PE) =>
<phase amount>“x”<wire type>“ + “<neutral amount>“x”<wire type>" P:"<PE amount>“x”<PE size>

When wire type is single-core/insulated product (separate PE) =>
<phase amount>“x”<wire type>“ + “<neutral amount>“x”<wire type>“ + “<PE amount>“x”<PE wire type>

FAMILIES (weight not defined)

When MC Number of Cables > 1 (so 2 or more):
When wire type is multi-core family (included PE) =>
<number of cables><separator><prefix><wire type>" "<phase amount>“x”<phase size>“+”<neutral amount>“x”<neutral size>“+”<PE amount>“x”<PE size><suffix>

When wire type is multi-core family (separate PE) =>
<number of cables><separator><prefix><wire type>" "<phase amount>“x”<phase size>“+”<neutral amount>“x”<neutral size>“ + “<PE wire type>" "<PE size><suffix>

When wire type is single-core/insulated family (included PE) =>
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When wire type is multi-core family (included PE) =>
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When wire type is single-core/insulated family (included PE) =>
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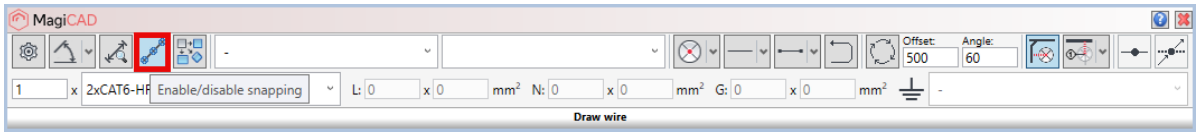
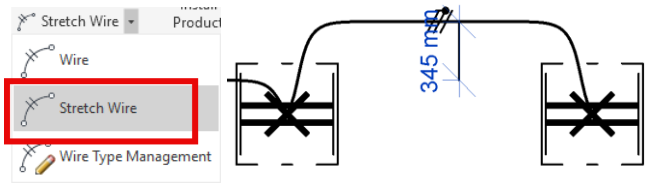
When wire type is single-core/insulated family (separate PE) =>
<phase amount>“x”<wire type>" "<phase size>“ + “<neutral amount>“x”<wire type>" "<neutral size>“ + “<PE amount>“x”<PE wire type>" "<PE size>

Snap off button in Wire tool
We have made a new button which will turn on/off Revit's own snap options while drawing a wires.



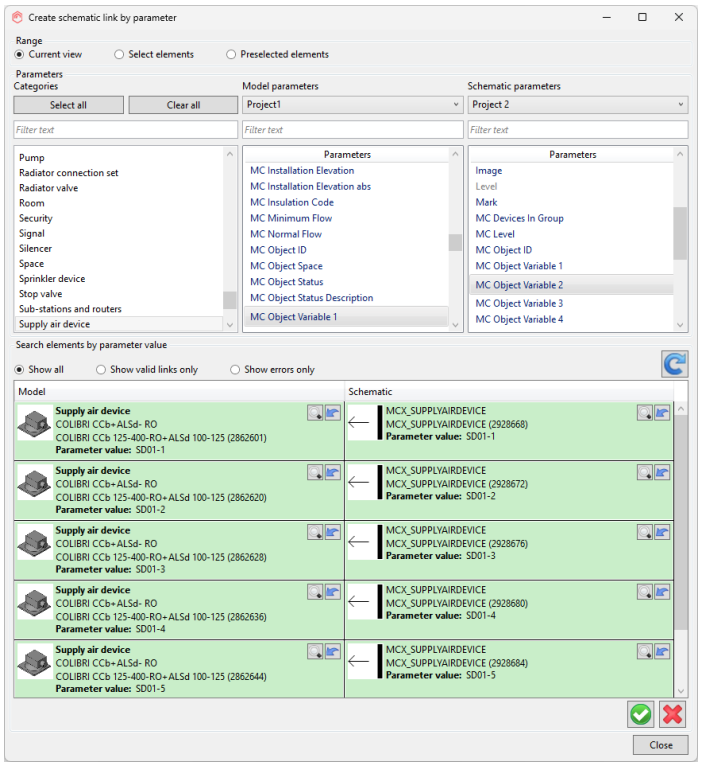
Stretch Wire function
Since modifying Revit wires is rather workful, we have now created a "Stretch Wire" function. You need to select two points from wire(s) and all vertex points between the selected points are selected. Then you need to define direction and length of the stretching by clicking two points on the screen.



1.4 Schematics

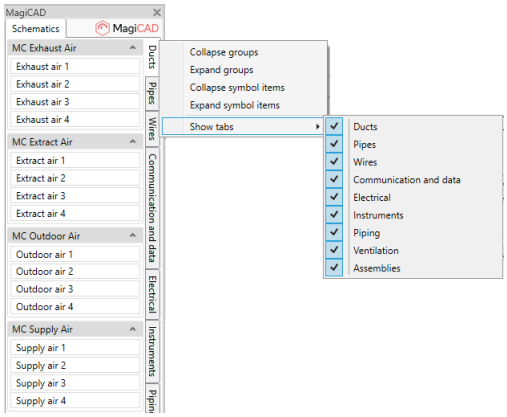
Move and Stretch improvement to support multiple elements
The Move & Stretch function in MagiCAD now allows you to move multiple parallel schematic lines simultaneously saving considerable editing time. Symbols are moved together with the lines, and connected branches are stretched to maintain consistent layouts. The function can also be used to adjust selected symbols on parallel lines.

Schematic link creation based on parameter
Linking schematic symbols to model elements is a fundamental part of schematic workflows, but traditional selection-based linking can be slow. MagiCAD now introduces a new alternative linking option where schematic symbols can be linked to project elements based on matching parameter values.



Manage schematics tool palette visibility

It is now possible to hide and reorganize palette tabs based on your personal workflow, which makes it easier to find the correct symbol in increasingly large symbol libraries.



2 Resolved issues

2.1 Common

Copy branch crashed Revit
Issue where copy branch tool crashed Revit

Clean-up and Deliver Unexpected error with first run
Clean-up & Deliver tool threw exception on the first run if naming options were not defined.

Export IFC 4.3.2.0 - Revit project information parameters missing values
If a Property Set was created using Revit parameter values from Project Information, during export the parameters were exported but the values were not
Now the Project information parameter values are retrieved.

Clean Up & Deliver on ACC - Can't see views
Clean Up & Deliver browse button was not working if there was a published version pre-selected when opening the tool. It was neither showing any views. This is now corrected so that the file path is empty if the file is cloud shared.
Tool won't give exceptions anymore when using published Revit projects as a source file and the "Browse..." should be working properly.

Changing status with Change Properties, symbol "-" doesn't work
"-" character was not working properly when changing status with Change Properties tool.

MagiCAD's erase branch and insulation
Erase Branch tool was not setting insulation correctly for the new fittings that were created due to the process.

Bill of Materials cannot be used if there are duplicate Revit masses
Bill of Materials couldn't be used if project contained duplicated Revit masses which were not created by the Selection Area tool. However, usage is still prevented if there are duplicate selection areas.

Unexpected error in system type manager with system classification Other Air
Unexpected error occurred in System Type Manager when Other Air system classification was used in the project.

The IFC append function is not working with IFC files exported from Revit
IFC Export failed when appending to IFC file without IfcSite. Corrected now to work without ifcSite.

Update parameter slow with insulation updates
Update Parameters was slow when insulation parameters were updated. Performance of the Update parameters and Change Properties has been improved for insulation related adding, deletion or changing.

Connect external Dataset that is placed on ACC / Forma = Disconnected
Issue where dataset couldn't be found if Autodesk Desktop Connector workspace path was changed and dataset was used from that path.

Product browser for 3-port valves shows empty
Issue where the product browser list was empty in specific scenarios.

Product properties static dimension image is not working
Issue where product image dimensions were not always displayed when properties were used from the model or dataset.

Revit crashes when using MC install product
Install Product -tool crashed Revit in specific scenarios where a large dataset was in use.

Data missing in IFC4 and IFC4x3 header section
Author, Organization, and Originating System were missing from the IFC4 and IFC4x3 header section. This has now been corrected and the data is available.

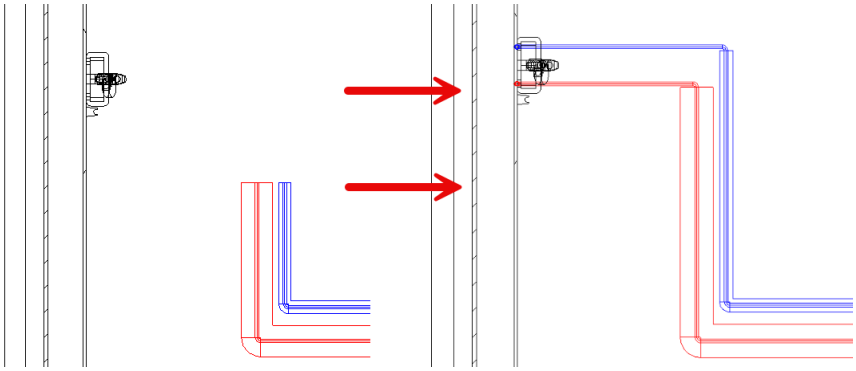
2.2 Ventilation and Piping

Installation code and status are twice in installation dialog
Installation Code and Object Status was duplicated when installing drainage device or drainage component.

Valve Tool valve rotation is not according to the device if device is rotated
Valve rotation set by Valve Tool was not according to the device if the device was rotated.

Distance between symbols is not taking value from database
2D symbol gap was not according to the selected product connectors. Now, if a product is selected, the default symbol gap is taken from the product. This makes installation of domestic water devices with hot and cold connectors more user-friendly.

DW pipe connection acting strange is connector is back
Pipe Connection -tool couldn't connect pipes in scenarios where no bends were needed to make the connection from pipes to the connectors. Also corrected issue where pipes were not extending to make the connection.



Flow damper safety distance bug
Calculation used incorrect flow damper safety distance when fetched from database.

3-way valve calculation report values in wrong columns
The values for the 3-port valves were incorrectly positioned in the calculation report.

Incorrect sizing methods in calculation with project connection nodes
Calculation sizing criteria were not used correctly if network extended to the another project by using connection nodes. This occurred in scenarios where some of the elements in the another project had element specific sizing criteria. Those were not taken into account when doing the sizing. Now calculation can read that criteria from its own project. Object status was corrected along with the task as well. If object status was used for locking, then those should work as well now in similar situations as described before. Corrections were made to ventilation safety distances as well when performing the calculation.

Install product air terminal pin adjustment missing
Pin adjustment selection was missing from Install Products when selecting air terminals.

Network volume isn't shown in if there is header pipe(header manifold) in the network
Network volume was missing if there was header pipes in the network.

Coupling in pipe series removes DPV from network (Dry sprinkler)
Dry sprinkler error "There is no DPV for this design area" was given if there were couplings in pipe series and those were installed between pipe and DPV. Additionally, there were issues how separate network parts were combined to nodes when there is DPV involved, this is corrected as well.

2.3 Electrical

Trip unit and pd description not updated to switchboard schematic data blocks
Trip unit (TC) and pd description (PN) were not updated to switchboard schematic data blocks when using Set Properties. It worked with Update Circuits.
Now it works also with Set Properties.

Unhandled error when moving circuits in Manage Links

When two circuit rows in switchboard schematic had the same circuit link, moving circuits in the schematic caused an error.
This has now been fixed.

MC Circuit Power not updated correctly when power is in instance
Value from Revit's parameter True Power is copied to power circuit's MC Circuit Power parameter when updating "Circuit power" from Update Parameters. No changes to ELV circuits.

2.4 Schematics

Update diagram doesn't accept changing of first cable
If any changes were made to the first cable of the circuit, Update circuits didn't find the device anymore and asked to delete the device and install it again.
Now it is possible to modify also the first cable as long as it isn't deleted in any point.

Unlink objects in fast pace from Repair Links and you get a fatal error
Repair Links command could cause a Revit fatal error in certain situations when links were removed rapidly while scrolling through the dialog.

2.5 Supports & Hangers

Batch install gives an error on ducts
Batch Install could not be used if the network contained tap connections.