



# MagiCAD for AutoCAD

Release notes for version 2027

20/05/2026

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## 1 New features

### 1.1 Common

#### MagiCAD supports AutoCAD and Navisworks 2027

Adding support for AutoCAD and Navisworks 2027.

MagiCAD for AutoCAD 2027 will work on AutoCAD 2024-2027.



#### 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

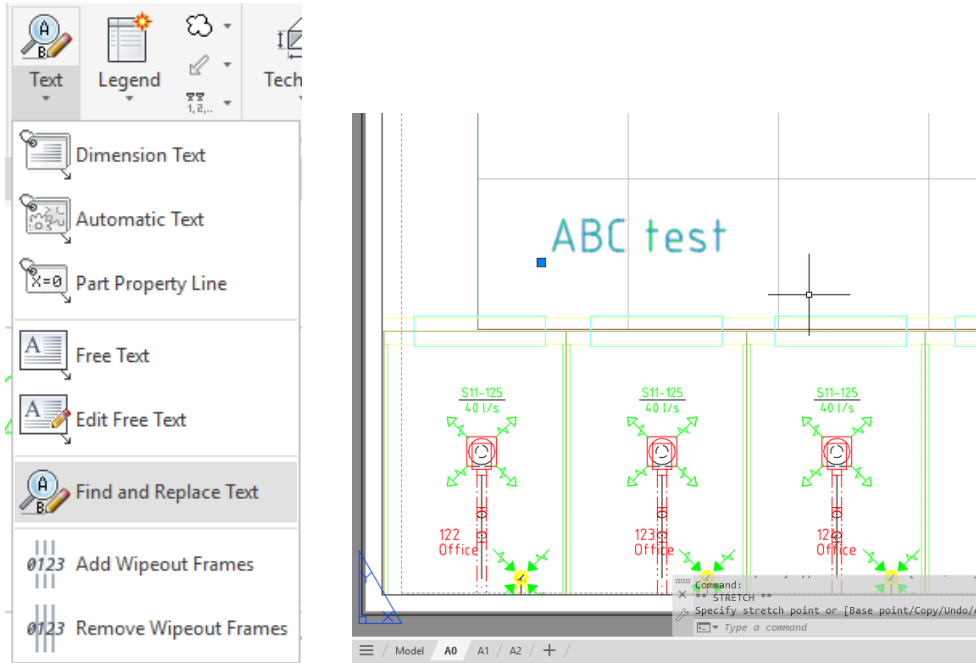
IFC2x3:

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

### Ability to use Find and Replace Text in Paper Space

Find and Replace text can now be used in Paper Space.

**Note:** For Manual selection to work, the text must also have been created and added in the paper space and not the Model space.



### Quick IFC Export now uses the dwg name for the exported IFC-file's name

Now the quick IFC export from the current drawing, run via CTRL+E or "-MAGIIFCEXPORTCURDWG" / "-MAGIIFCCD", exports the file to the defined folder in the selection set by using the current model drawing's name as the created IFC file's name as well. This makes it easier to run IFC exports from the current drawing when only a single selection set is needed to do the job.

### IfcDistributionSystems in IFC4 and IFC4x3

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

### IfcLengthMeasure

Updated MagiCAD Property sets to use IfcLengthMeasure instead of IfcPositiveLengthMeasure.

## 1.2 Ventilation and Piping

Common

### Bill of Materials updates of column texts

The columns related to the surface area and thickness have been updated to be more clear:

Class	Size	Series	Product	N	L [m]	Insul A	s [mm]	Surface area
Duct	125	Safe	SR-125	59	48.0			18.8 m <sup>2</sup>
Duct	160	Safe	SR-160	6	15.7			7.9 m <sup>2</sup>
Duct	200	Safe	SR-200	4	8.1			5.7 m <sup>2</sup>
Duct	250	Safe	SR-250	2	12.2			9.6 m <sup>2</sup>
Duct	315	Safe	SR-315	5	16.2			16 m <sup>2</sup>

Class	Size	Series	Product	N	L [m]	Surface area of insulation [m <sup>2</sup> ]	Insulation thickness [mm]	Surface area of ducts & fittings [m <sup>2</sup> ]
Duct	125	Safe	SR-125	59	48.0			18.8 m <sup>2</sup>
Duct	160	Safe	SR-160	6	15.7			7.9 m <sup>2</sup>
Duct	200	Safe	SR-200	3	8.5			5.4 m <sup>2</sup>
Duct	250	Safe	SR-250	2	12.2			9.6 m <sup>2</sup>

Ventilation

### Flow damper product data use in safety distance checks

If a flow damper with adjustment curves has product data for safety distances, then those can be used instead of the safety distances set in the project.

These safety distances can be seen via the Cloud, if they exist in the product:

The screenshot shows the MagiCAD Connect interface for a product named RABC-VAV. The interface is divided into a 3D model view on the left and a product data panel on the right. The product data panel includes fields for Manufacturer name (Bevent Rasch), Release date (24/10/2025), and Certification status (Fully MagiCAD Certified). A section titled 'MagiCAD technical information' is highlighted with a red box, containing the following data:

Parameter	Value
Duct connection size [mm]	100
Safety distance from bend	2.0
Safety distance to bend	0.0
Safety distance from branch	5.0
Safety distance to branch	0.0
Safety distance to air terminal	0.0
Safety distance from/to other components	0.0

At the bottom of the interface, there is a Bevent Rasch logo and buttons for 'Insert', 'Release notes', and 'Close'.

Piping

**Improvement to Heating & Cooling plants**

New Heating & Cooling plants can have multiple primary and secondary heating systems connected to them, as well as drainage systems.

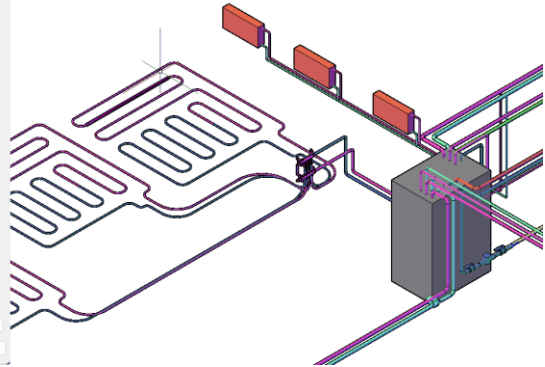
This to better support design utilizing, for example multiple different heat sources, like boilers, solar panels, and ground heat, and at the same time also providing the Heating & Cooling plant to serve multiple different heating systems, like radiators and underfloor heating systems at the same time. The pressure losses can also be simulated for the secondary heating systems, allowing for more precise design of the systems overall.

MagiCAD - Hydronic Network Balancing Report

Supply

Location	Level	Nod	System	Type	Series	Product	Size	L [m]	Resultat	P [W]	qv [l/h]	v [m/s]	T [°C]	Q [W]	dp/L [Pa/m]	dp [kPa]	pt [kPa]	adj	Warnings
Storey 1	1	H1	SUB STA		PRIM-S_12										0.014	15.044			
Storey 1	1	H1	PIPE	Cu			35	0.0	6400	0.0533	0.07	35.0	0.6	2.7	0.000	15.030			
Storey 1	1	H1	BEND-90	Cu			35	0.3	6400	0.0533	0.07	35.0	4.9	2.7	0.001	15.026			
Storey 1	1	H1	BEND-90	Cu			35		6400	0.0533	0.07				0.003	15.026			
Storey 1	1	H1	PIPE	Cu			35	1.3	6400	0.0533	0.07	35.0	21.7	2.7	0.004	15.022			
Storey 1	2	H1	BRANCH	Cu			35/10		6400	0.0533	0.07				0.134	15.010			
Storey 1	1	H1	PIPE	Cu			10	1.5	2400	0.0200	0.36	34.9	6.8	278.5	0.406	14.984			
Storey 1	1	H1	BEND-90	Cu			10		2400	0.0200	0.36				0.109	14.478			
Storey 1	1	H1	PIPE	Cu			10	1.4	2400	0.0200	0.36	34.8	6.4	278.5	0.302	14.369			
Storey 1	3	H1	BRANCH	Cu			10/10		2400	0.0200	0.36				0.010	13.967			
Storey 1	1	H1	PIPE	Cu			10	0.4	800	0.0067	0.12	34.7	1.6	27.9	0.010	13.932			
Storey 1	1	H1	BEND-90	Cu			10		800	0.0067	0.12				0.012	13.962			
Storey 1	1	H1	PIPE	Cu			10	0.1	800	0.0067	0.12	34.6	0.6	27.9	0.004	13.950			
Storey 1	-1	H1	RADIAT			3401-010 10 (L)			800	0.0067					12.843	13.946	2.4		
Storey 1	4	H1	HEATIN			C22-300x6 10 (L)			800	0.0067		34.6						1.103	
Storey 1	1	H1	PIPE	Cu			10	1.3	1600	0.0133	0.24	34.7	6.2	138.6	0.186	13.961			
Storey 1	5	H1	BRANCH	Cu			10/10		1600	0.0133	0.24				0.015	13.775			
Storey 1	1	H1	PIPE	Cu			10	0.4	800	0.0067	0.12	34.6	1.6	27.9	0.010	13.760			
Storey 1	1	H1	BEND-90	Cu			10		800	0.0067	0.12				0.012	13.760			
Storey 1	1	H1	PIPE	Cu			10	0.1	800	0.0067	0.12	34.5	0.6	27.9	0.004	13.730			
Storey 1	-1	H1	RADIAT			3461-010 10 (L)			800	0.0067					12.351	13.735	2.4		
Storey 1	6	H1	HEATIN			C22-300x6 10 (L)			800	0.0067		34.5						1.383	
Storey 1	1	H1	PIPE	Cu			10	1.2	800	0.0067	0.12	34.6	5.5	27.9	0.024	13.769			
Storey 1	1	H1	BEND-90	Cu			10		800	0.0067	0.12				0.012	13.735			
Storey 1	1	H1	PIPE	Cu			10	0.3	800	0.0067	0.12	34.4	1.6	27.9	0.010	13.723			
Storey 1	1	H1	BEND-90	Cu			10		800	0.0067	0.12				0.012	13.714			
Storey 1	1	H1	PIPE	Cu			10	0.1	800	0.0067	0.12	34.3	0.6	27.9	0.004	13.701			
Storey 1	-1	H1	RADIAT			3461-010 10 (L)			800	0.0067					12.256	13.698	2.4		

Previous warning/error      Next warning/error      OK - Update to model      Cancel



### 1.3 Electrical

#### Improved cable and conduit elevation properties

Elevation properties added to cables, conduits and cable route, led stripe and busbar fittings.  
 Elevation handling of fittings have been made better.

#### New attributes for converted objects

Following new attributes have been added for converted objects:

Impact rating have been added for all electrical and communications/data/BA objects

Light control have been added for luminaires and LED-stripes

Flux [lm] have been added for luminaires and LED-stripes

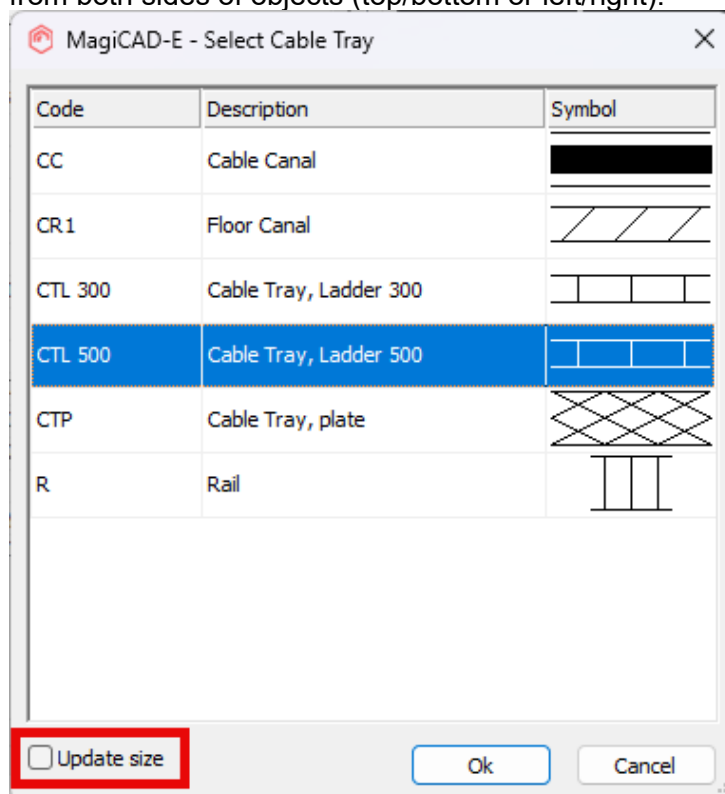
Correlated Colour Temperature [K] have been added for luminaires and LED-stripes

Colour Rendering Index have been added for luminaires and LED-stripes

#### Busbar/lighting track/LED-stripe/cable tray product changes

Now when changing product of busbar, lighting track, led stripe or cable tray with Change Properties or with Part Properties, also size will be updated to the parts of the system if "Update size" checkbox is active.

If the changed product is of different size, the size of the drawn parts will be adjusted evenly from both sides of objects (top/bottom or left/right).



Sizes cannot be updated to other drawings using Change Properties.

NOTE! This feature has few unfinished things, which should be fixed in the next version:

Vertical tee's, supply units and circuit units of busbars have issues with size change

Updating size works only in current drawing

**Angle, connection size and branch lengths to reports**

New attributes to report:

angle (bends only for cables and conduits)

connection size (cables, conduits and etc. with fittings)

branch lengths (busbars)

**ELV data from database**

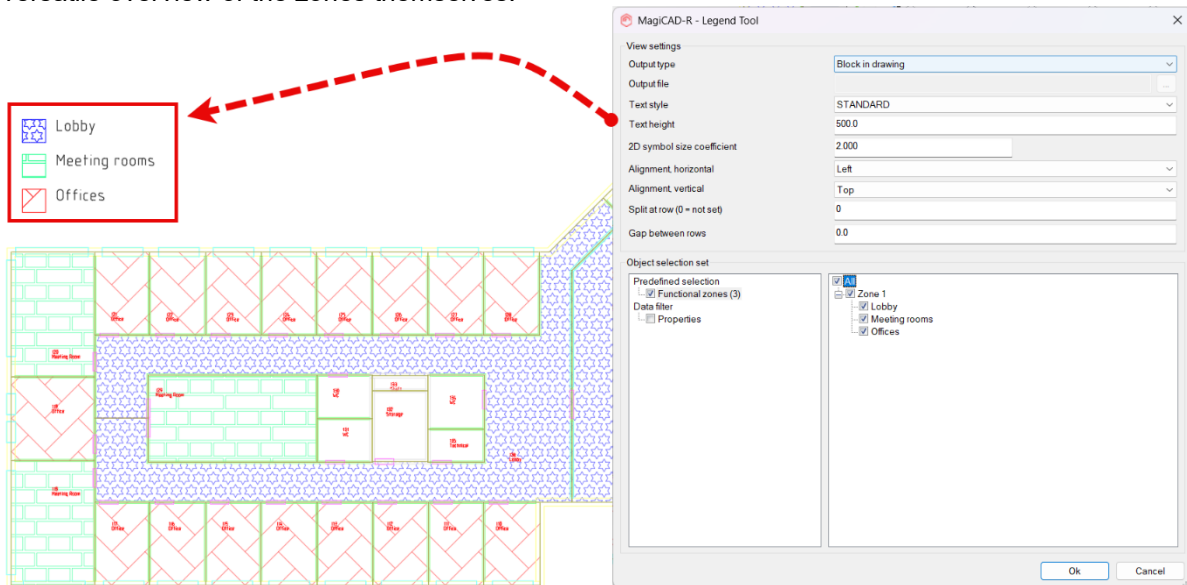
When adding a new product from database, elv data is now read from the product.

## 1.4 Room

### Legend for zones

To give a much better overview of which the zones are in the drawing, to better plan for the overall design of the demands of different zones, a Zone Legend-feature has been added, using which various Legends of the zones in the drawing can be listed.

Hatch patterns and transparency-settings have also been added to the zones to allow for a more versatile overview of the zones themselves.



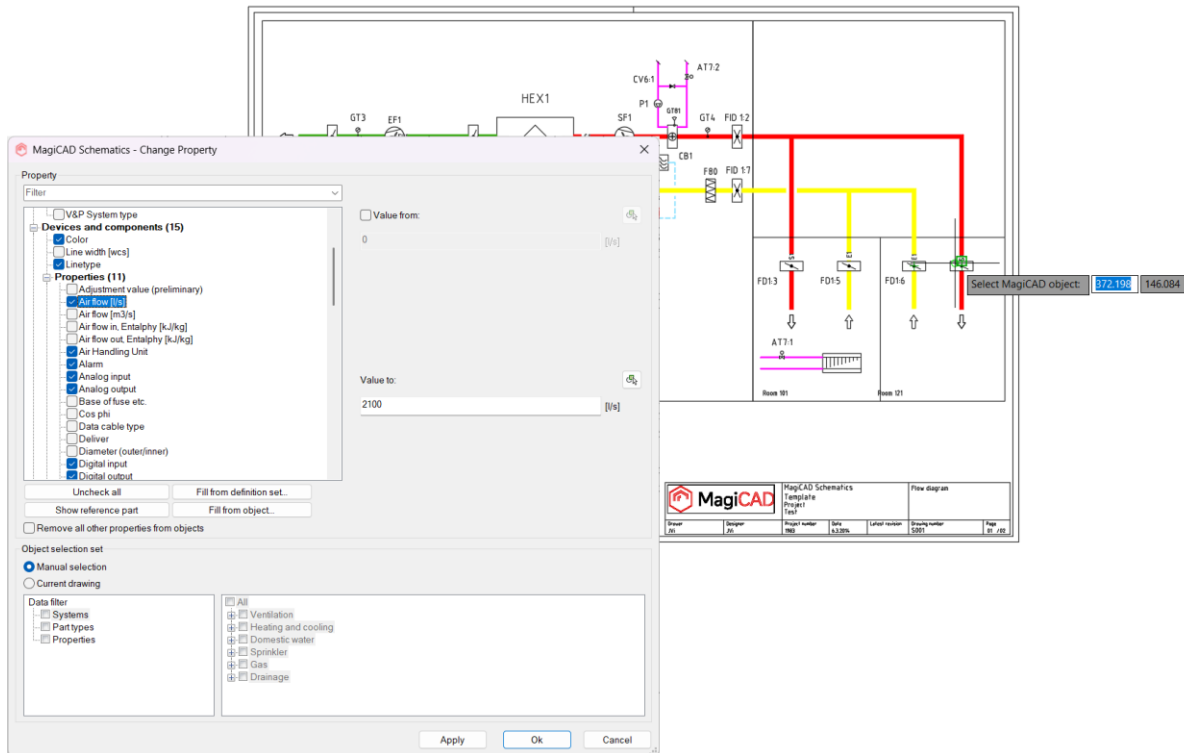
## 1.5 Schematics

### Change Properties update

The Change Properties function has been updated to allow for easy copying of values between objects, making design a lot faster and less prone to errors.

The overall user interface has also been updated to be more in line with the Change Properties dialogs of other MagiCAD disciplines, making it more familiar to work with different disciplines.

The old Set Properties command is available but doesn't have a button anymore.



## 2 Resolved issues

### 2.1 Common

#### "Save as" works poorly

Dialogs didn't give a clear signal if something could be saved or not.

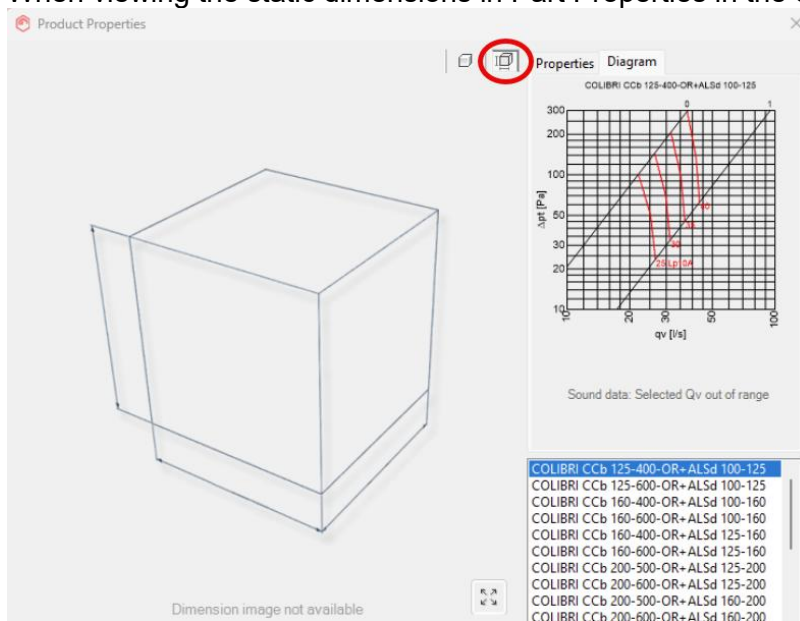
Now if a configuration can't be saved (when clicking "Save" or "Save as" configuration buttons), control with missing data is focused and warning beep is sounded. Same logic as when clicking "OK" in the dialog.

#### EXPLODE-command issues with MagiCAD installed

The speed of the EXPLODE command caused some issues which should now have been corrected.

#### The static dimensions weren't working properly

When viewing the static dimensions in Part Properties in the drawing, they weren't shown.



#### The IFC append function did not work with IFC files exported from Revit

IFC Export failed when appending to IFC file without IfcSite. This has now been corrected and the file works without IfcSite.

#### Data missing in IFC4 and IFC4x3 header section

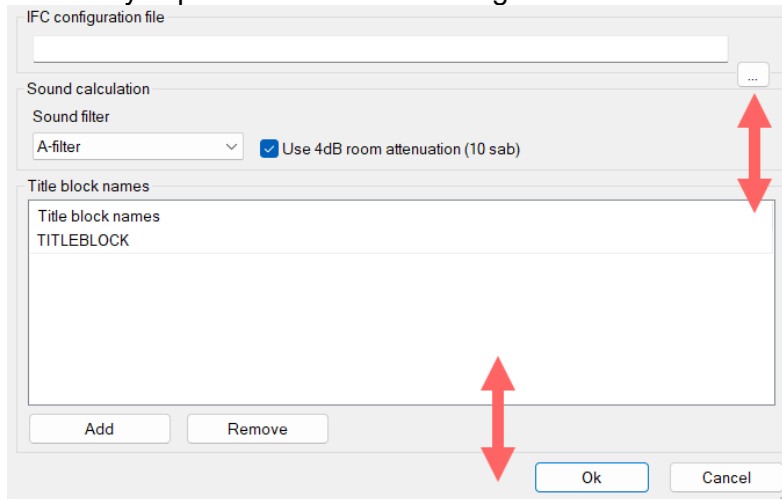
Author, Organization, and Originating System were missing from the IFC4 and IFC4x3 header section. This has now been corrected and the data is available.

## 2.2 Ventilation and Piping

Common

### IFC Configuration file browse-button didn't stay in place

When stretching the project settings dialog the browse-button for the IFC configuration file didn't stay in place. Now the anchoring has been fixed.



### Better checking to to Network and online projects

Fixed problems when several users simultaneously changed project data.

### Product Browser rounded the product's weight

Decimals were rounded in a number of places in different dialogs. A value like 0.28 kg from MagiCAD Create was shown as 0.3 kg in the product browser, while a Property value in the product browser of 6.4 kg was shown as 6 kg in the new Part Properties dialogs. This has been corrected and more decimals are shown.

### Slowness when symbol database is not in a local file

To improve the speed when working with symbols, for example in network drives, the symbols are cached during current session when:

- Drawing pipe components.

- Running commands which use symbols in product selection dialogs.

### After branch copy, real product connectors were not drawn

For real duct fittings the connectors of the products were not copied due to how data was handled. This has now been improved so that the data is correctly copied.

### MAGIFCQB-command removed data

*This command should not be used without backups and making sure it should be run.*  
 An issue with the command removed some existing data from the project file.

### System User Code issue

The System user code wasn't visible in dimension texts, in sections, when the object was from an XREF.

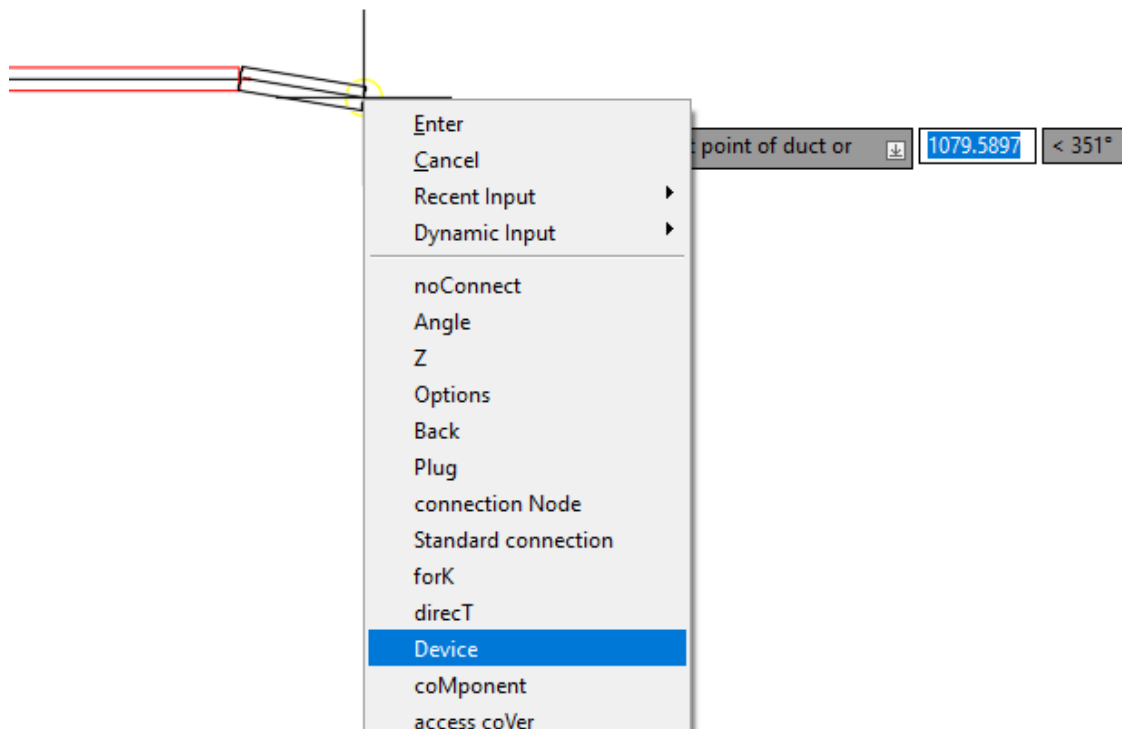
### NCC and National code was missing from integrated reductions

We added NCC update as well as fixed the National code, which both were missing from integrated reductions.

Ventilation

### NCC was not added when installing an air terminal device via the context menu

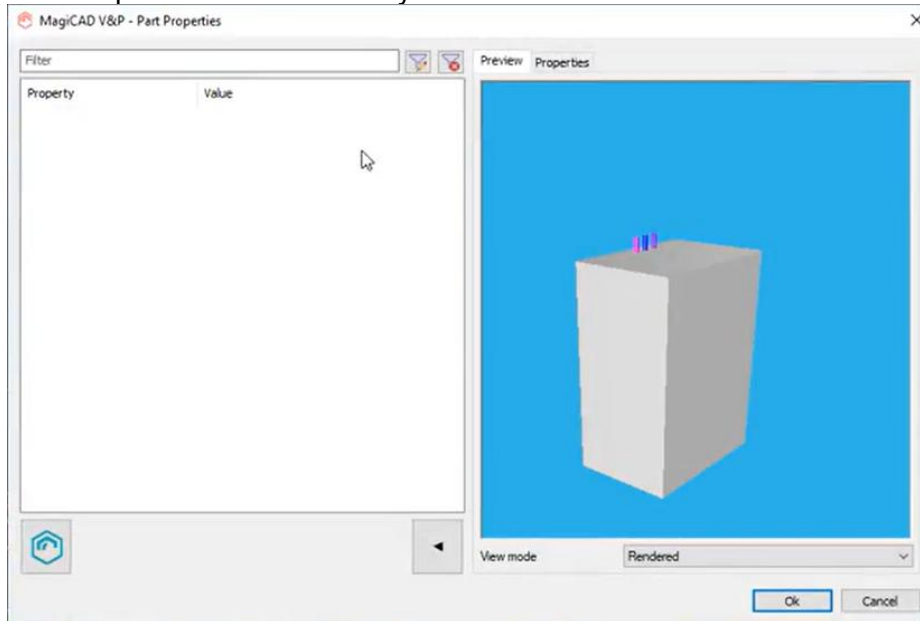
When drawing a duct and the right-clicking to open the context menu, and selecting to install an air terminal device, the NCC-codes weren't added to the device.



## Piping

### Water heater part properties were empty

Part Properties didn't show any information for substations.



### Insulation in underfloor heating pipes

When the user had installed heating pipes with insulation and then do underfloor heating pipes with the Underfloor Heating - functions, then it automatically inserted insulation to the underfloor heating pipes.

Now the insulation isn't added.

### Classical dialog using the "+"-sign for pipes

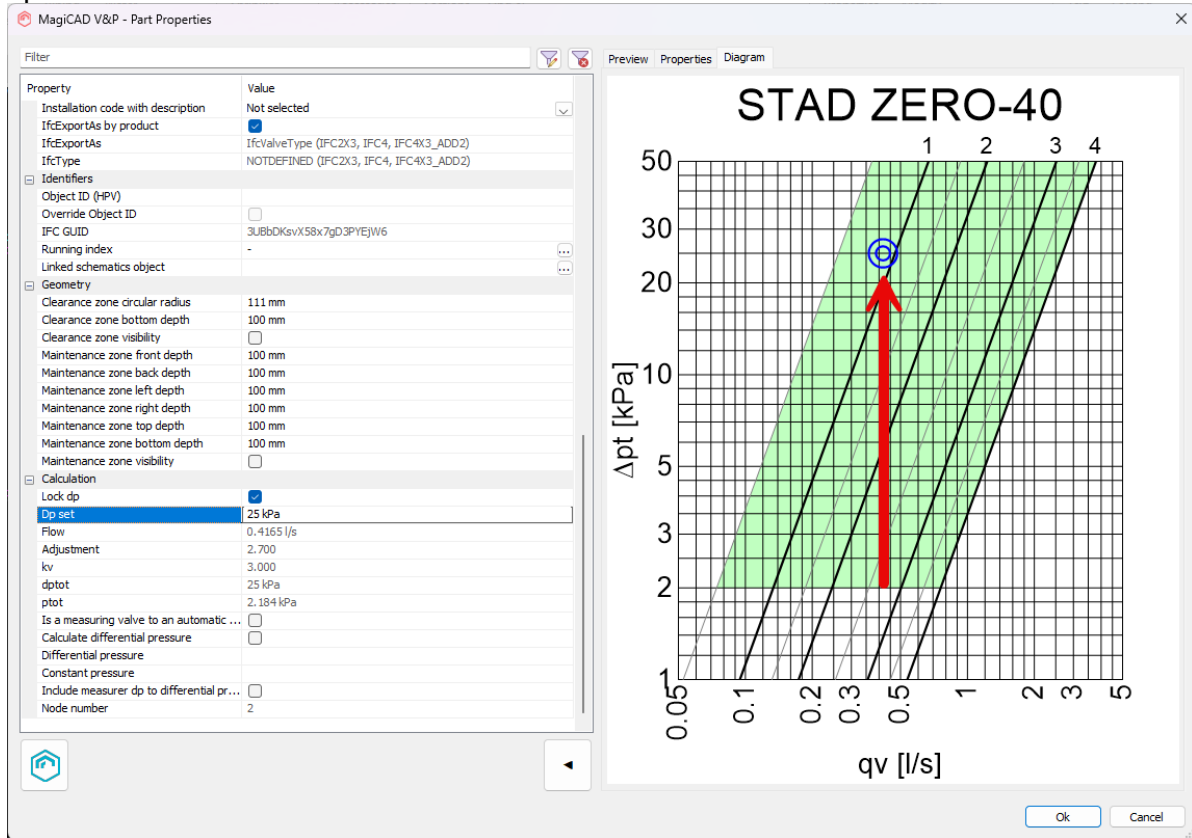
When using classical dialogs and starting to draw from the "+"-sign for pipes, the Options-dialog will no longer open when using the classical dialogs.

Only when drawing from a device will the dialog open.

### Zone valve's diagram did not update after "lock dp" -change in new Part Properties

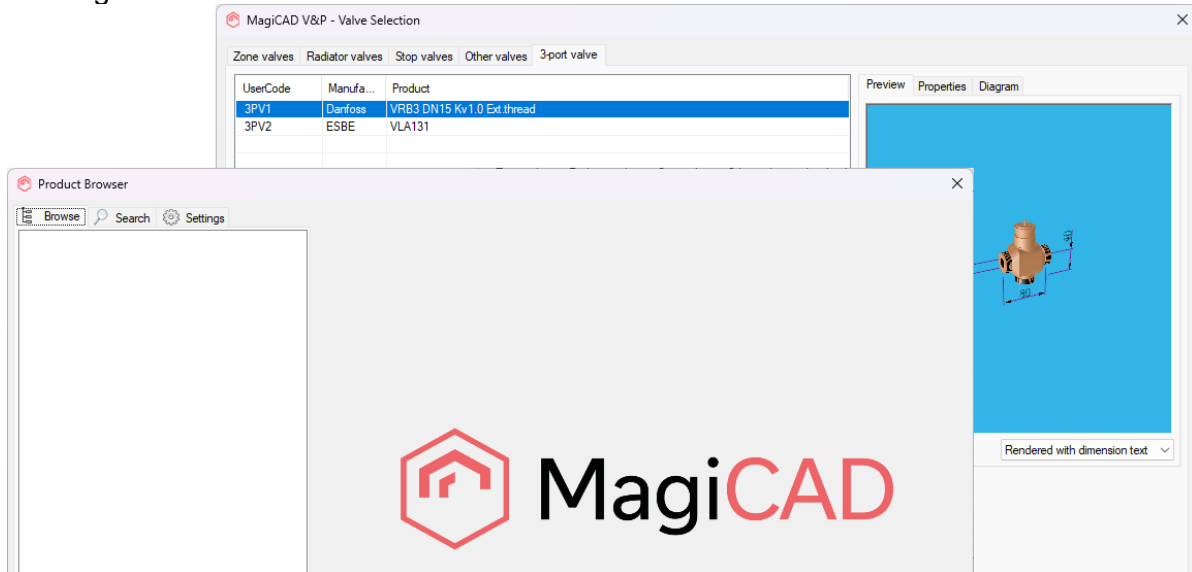
In the new Part Properties dialog the zone valve's diagram didn't update correctly after using lock dp.

Before the operation point was stuck at the bottom of the diagram. Now it is set to its correct dp-value:



**Product Browser list didn't work for 3-port-valves**

The 3-port-valves' list in the Product Browser was empty and products had to be added only via MagiCAD Connect.



Other

**Copy and paste function for Drainage series**

It was not able to copy a Drainage series, and the issue has been fixed.

**Gas and sewer pipe's linetype did not update after height level change**

Gas and sewer pipe's linetype update after elevation change is fixed.

**Systems missing in pump installation**

Sprinkler and gas systems weren't available as selection-options for pumps immediately when starting a new CAD-session.

## 2.3 Electrical

### **Fatal error in Dialux import storey selection**

Dialux import crashed CAD when first selecting all floors with right mouse button and then clicking to unselect a single floor. This has been fixed.

### **Can't change system for Cable Tray (or LED-stripes) with Change Properties**

Changing system to Cable tray or LED stripe with Change Properties didn't change the system. Now system is changed properly.

### **Number of poles 0 in CAD properties palette**

When adding device from MagiCAD Cloud, number of poles shown in properties palette were 0. Changing the number of poles manually and updating devices with Update DWG fixes the issue.

Now number of poles is read correctly from database and it is shown correctly in properties palette after installing the device.

### **Create Circuit schematic loses snap options**

When creating a circuit schematic from switchboard schematics, snap options were something random in the created drawing.

Now it copies snap options from the circuit page template drawing.

## 2.4 Circuit Designer

### **Circuit Designer crashes when double-clicking common parts which are linked together with common part link**

When two common parts were linked together with "Common part link" function and you opened Part Properties from either of them, MC crashed.

Now Part Properties is opened correctly also to products linked with "Common part link".

## 2.5 Room

### **Issues with roof and intermediate slabs**

The area of roof slabs were calculated incorrectly and intermediate slabs weren't correctly recognized and instead were roof and floor slabs used.

### 3 Known issues

#### 3.1 Common

##### Problems with graphics acceleration in AutoCAD 2027

When hardware acceleration with its "Fast shaded mode" is on in AutoCAD 2027, crashes may occur e.g. when hovering over MagiCAD objects. At the time of the MagiCAD 2027 release there was no fix in sight for the problem, but it can be avoided by turning either the whole hardware acceleration or just its "Fast shaded mode" off from the Graphics Performance options of AutoCAD. Another workaround, which may work in some machines, is to set the GFXDX12 variable to 0 which will then make AutoCAD use the older directX 11 instead of the newer directX 12.

This has helped before in older AutoCAD versions as well when facing similar symptoms.

