

MagiCAD for AutoCAD

Release notes for version 2022 UR-2

09/02/2022

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1 New features

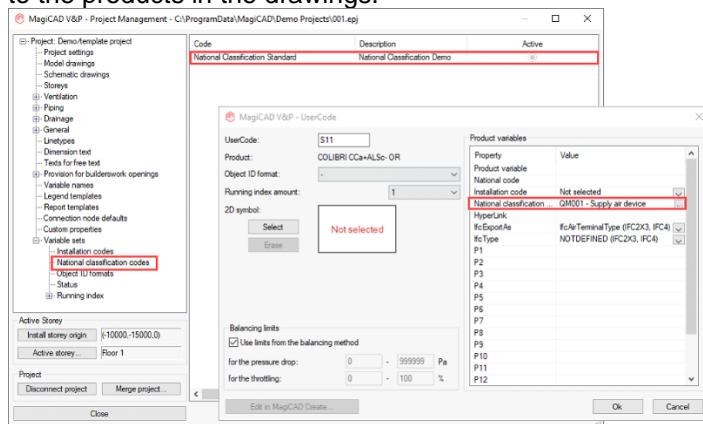
1.1 Common

File sharing service support

Implemented support for Autodesk Construction Cloud and M-Files. Please note that this is still under development and further improvements will come in upcoming versions.

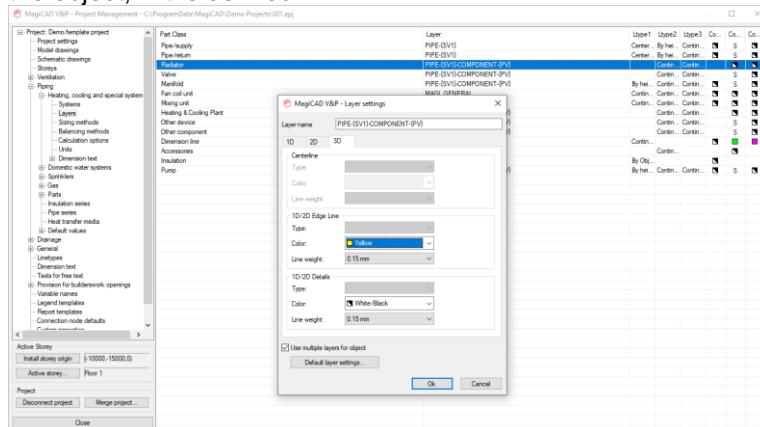
National classification codes

The new version of MagiCAD for AutoCAD introduces new functionalities and a workflow that enable users to set up and use different classification systems. This helps, in particular, to include various national classification systems into projects. Once a classification standard has been added to the project, products can be mapped to the classification when they are added to a project. When the products are later installed, the classification codes and parameters are then automatically added to the products. In case of changes to the classification information, the new information can be updated to the products in the drawings.

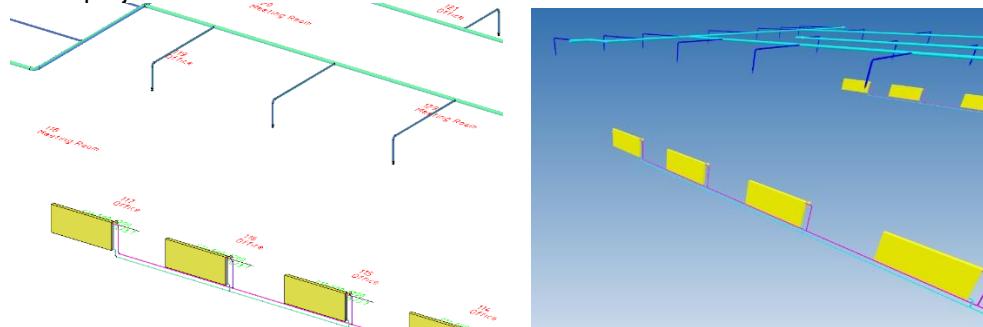


3D layer color used in IFC export

The IFC color of the objects is now taken from the 3D layer color (shown below) or from the status of the object, if it is defined:



In the project vs an IFC-viewer:



New IFC types

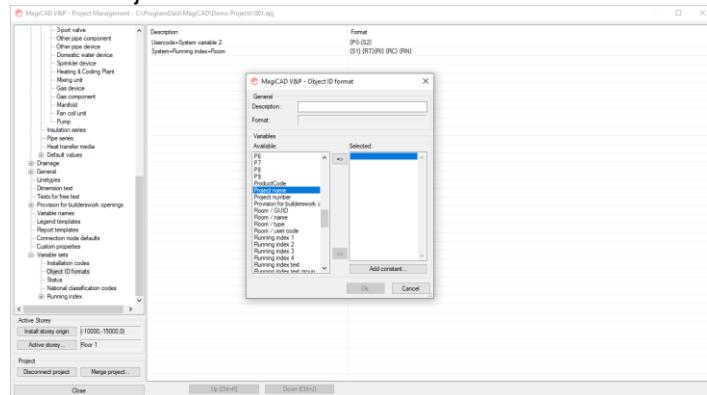
Implemented support for:

- IfcAirTerminalBoxType
- IfcElectricGeneratorType
- IfcElectricTimeControlType
- IfcGasTerminalType
- IfcInterceptorType
- IfcStackTerminalType
- IfcTransportElementType
- IfcUnitaryControlElementType*

*Note: it is exported as IfcDistributionControllerElement if you use IFC 2x3. That is because IfcUnitaryControlElementType is known in IFC4 only.

Added properties to Object ID format and updated naming in Electrical

New in Object ID format



Added in V&P:

Project number

Project name

System name.

Added in Electrical:

Project number

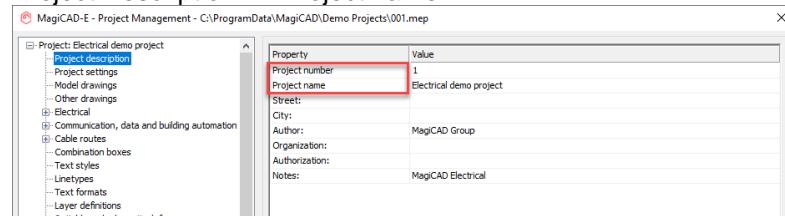
Project name

System Description

The naming here has also been updated in electrical:

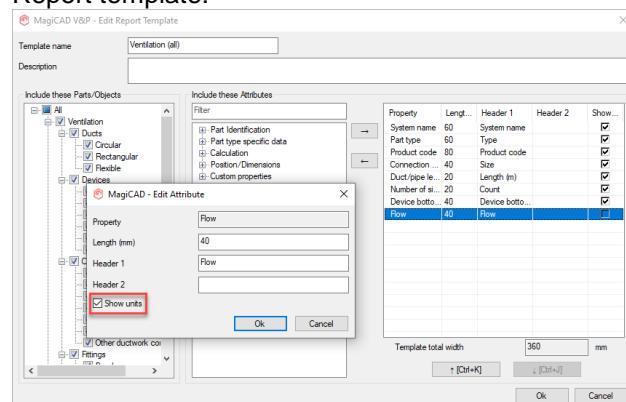
Project ID => Project number

Project Description => Project name



Possibility to export Technical values without unit sign in Report

it is now possible to select if units should be exported with the values or not, in the properties of the Report template:



Delimiter selection for numeric values in texts

DIMDSEP variable in AutoCAD is now used in both dimension texts and part property line:

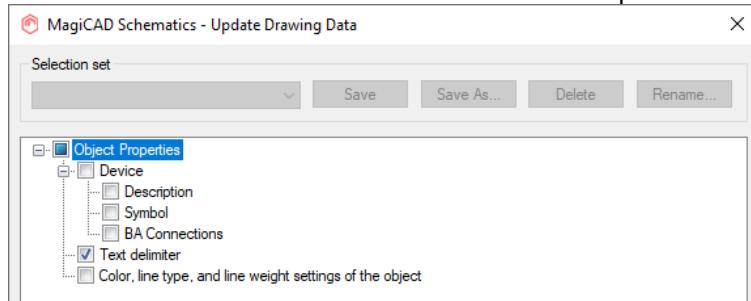
C11-500-1200
 600W/0.005l/s/3.7



This is in use in V&P, Electrical and Schematics.

Note that in V&P can the "REGEN"-command update these, as well as updating them using "Change Properties", while in Electrical does only "Change Properties" update these.

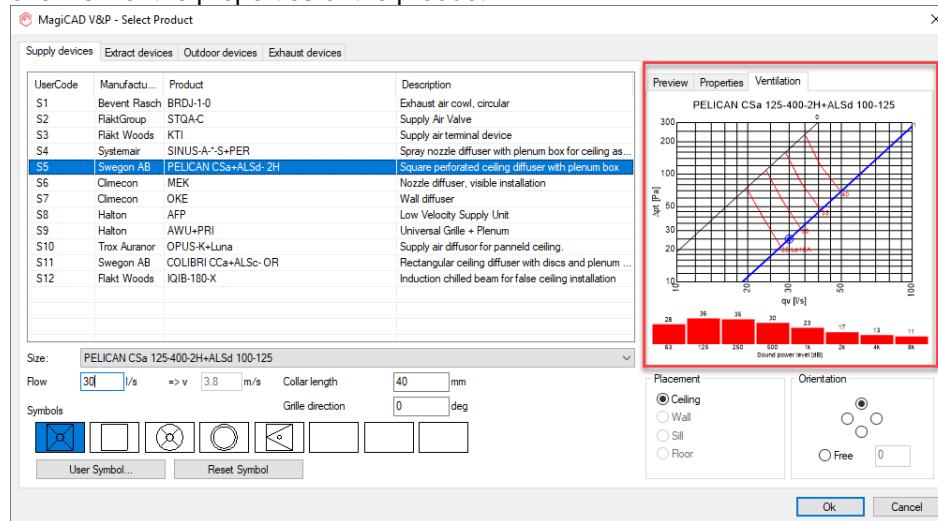
In Schematics we added "Text delimiter" for these updates:



1.2 Ventilation and Piping

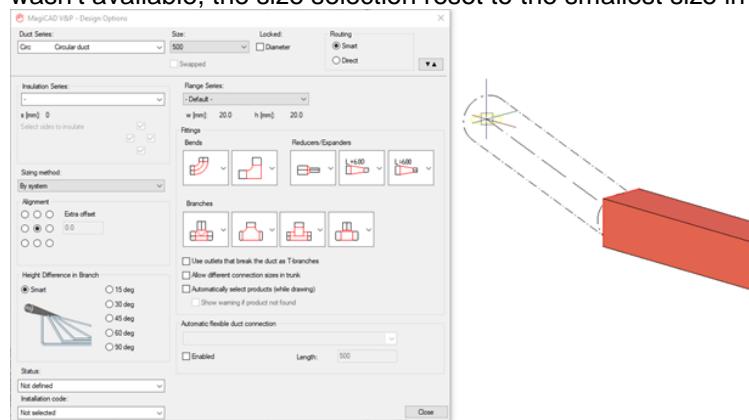
Easier to see product properties in the product installation dialog

Information which earlier was only found via "Properties" when right-clicking a product in the installation dialog's list, is now available in the installation dialog itself, which makes it easier to get an overview of the properties of the product:



Smallest duct/pipe used to be selected when changing duct/pipe series, but now the closest size is selected

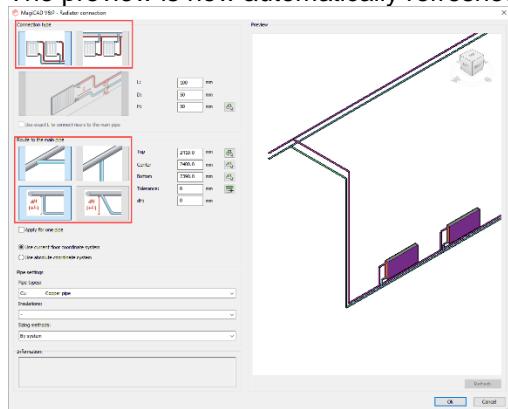
Earlier when drawing and selecting another duct or pipe series, where the exact corresponding size wasn't available, the size selection reset to the smallest size in the newly selected series:



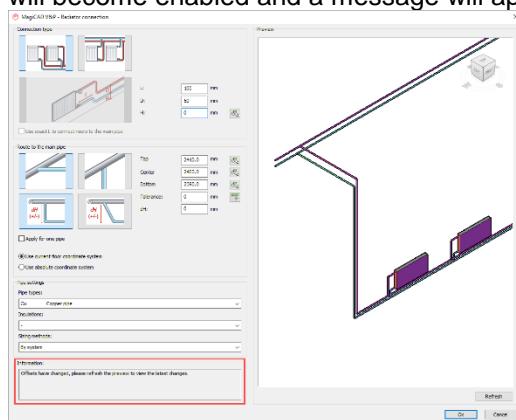
Now the program selects the closes possible size, as calculated by the perimeter of the segment in duct series and in pipes this selection is calculated based on the closest inner diameter.

New improvement to radiator connection tool

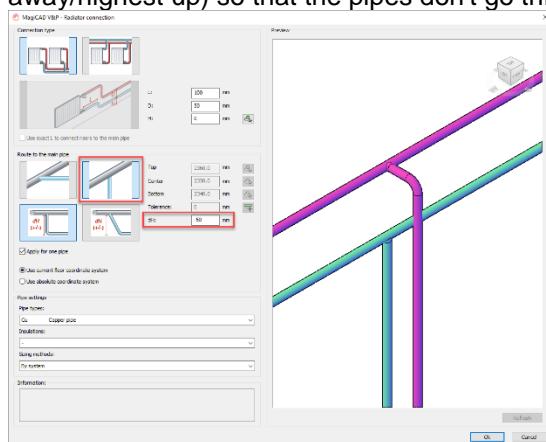
The preview is now automatically refreshed when the routing-buttons are selected.



If only the offsets are changed, then the preview isn't refreshed automatically, but the refresh-button will become enabled and a message will appear informing the user:

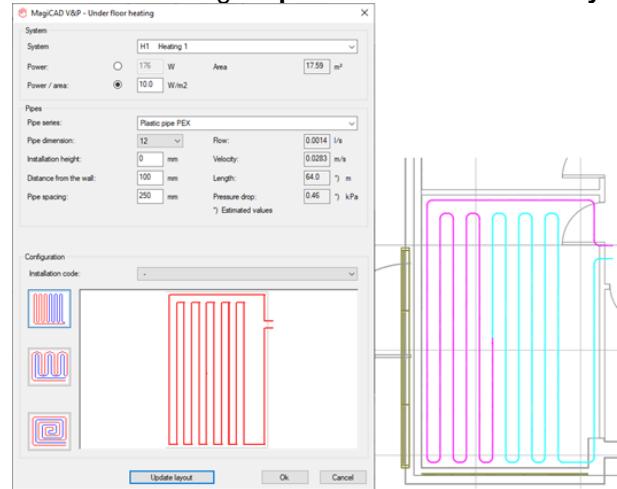


The routing, when the main pipes are on top of each other, has also been improved. Now it is possible to set the dH-value for these, and for example apply it for one pipe (which is the one the furthest away/highest up) so that the pipes don't go through each other:



New Underfloor heating function

Underfloor heating loops can now automatically be drawn using a MagiCAD function:



Multi-pipe drawing improvement from a number of devices

There were issues with drawing directly from devices, using multiple pipes, from various angles in Heating & Cooling plants

Radiators with bottom connectors

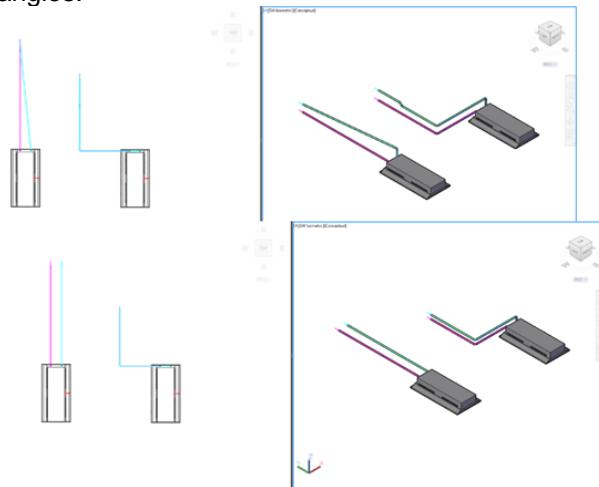
Radiator connection sets

Climate beams

Fan coil units.

where the pipes weren't drawn straight or got additional bends at certain locations. In many cases it wasn't possible to draw at all and nothing happened when trying to select the next point to which to draw to.

Now this feature has been improved to keep the pipes parallel when drawing from various connectors and angles:

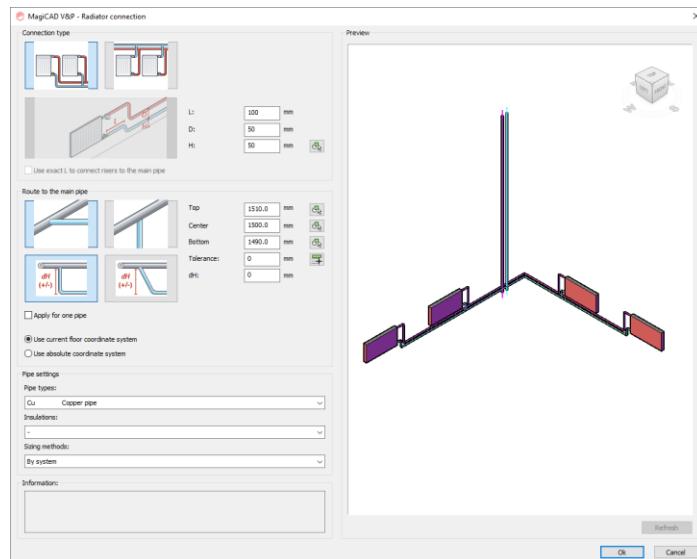
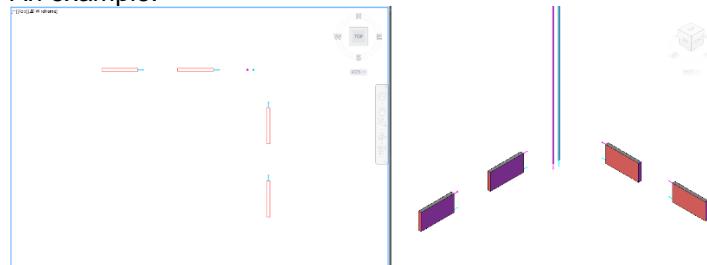


Manifolds have also partially been improved, but development is still ongoing.

Special connection cases for the radiator connection tool

There are some radiator connection cases which the options in the dialog don't cover. Now these options are handled automatically when certain setups of radiators and main pipes are selected.

An example:



Improvements to radiator connection sets

There were earlier a number of restrictions to the usage of *radiator connection sets with integrated valves* in MagiCAD for AutoCAD:

It wasn't possible to select different variants to the radiator

The user did always have to select an integrated valve, so it wasn't possible to install a radiator connection set without a valve

Part properties of the radiator connection set did not show which the integrated valve was, and neither was it possible to see the data of it

The integrated valve was not available in reports and legends

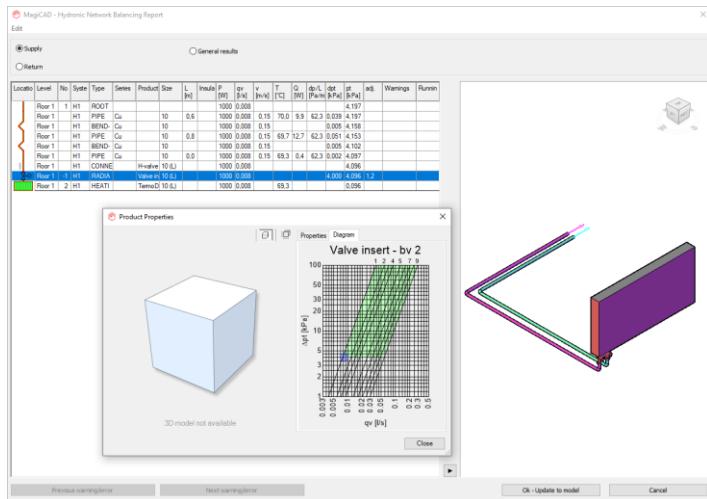
Radiator connection sets in general:

Moreover related to all radiator connection sets, there were issues with dual-pipe drawing from the radiator connection sets.

These listed restrictions have now all been improved and fixed:

- It is now possible to set which variants should be selected, or if no valve should be set at all.
- Drawing from radiator connection sets works without issues.

- Valves in the radiator connection set can be changed using Find and Replace.
- Part properties does now show the valve which has been added to the radiator connection set, the diagram, and the valve is available in Reports and Legends.

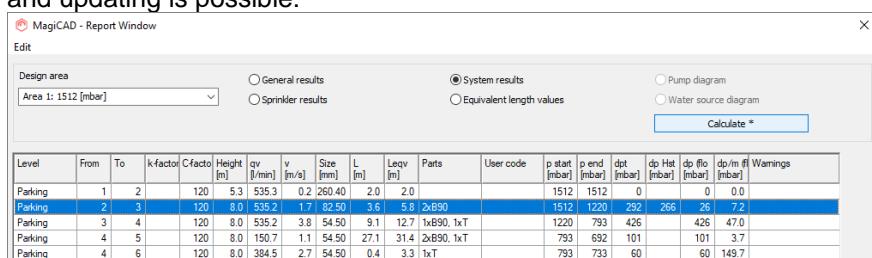


Improvements to sprinkler connection to speed up the drawing process

To assist the user, we added shortcut commands: MAGISPCINLINE (SPCI), MAGISPCANTENNA (SPCA), MAGISPCGRID (SPCG) to speed up the drawing, so that the command line can be utilized, if one does not want to go via the dialog.

Improvement to bi-directional sprinkler report to change pipe size

The "Calculate"-button shows with an asterisk (*) if some pipe size has changed in the sprinkler report and updating is possible:



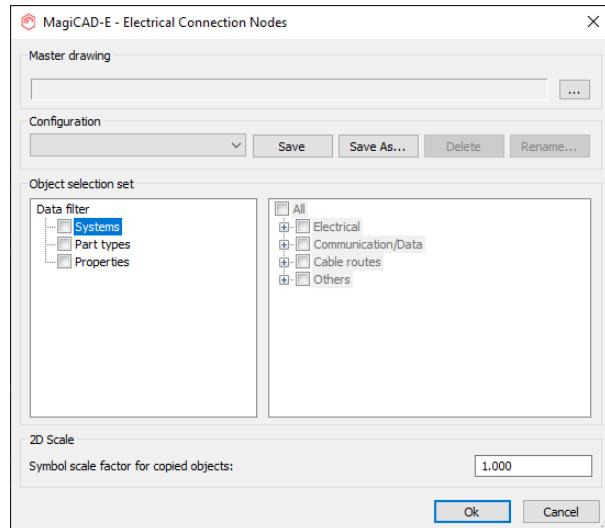
1.3 Electrical

Connections to Master DWG

With this new function, you can create a drawing to which you copy objects from a model drawing. The copied objects get their data from the master drawing, and by using the function again you can update any changed data or locations of these objects. Objects which fit the selection filter but have not yet been copied will be added as new copies. Removed/unfound objects will have their copies removed. You can also define the used symbol scale factor for the copied objects e.g. for making printouts with different scales.

The drawing to which you copy objects must be in the Other drawings list and the drawing from which you copy must be in the Model drawings list.

When starting the function you need to select the master drawing to copy from and from which systems and/or part types you want to make copies. Finally, set the desired scale factor for the objects which allow it.



After selecting what to copy/update, you will get a dialog which shows all the affected objects with their most essential information.

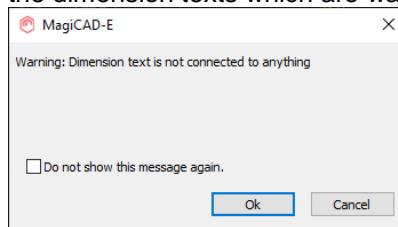
Drawing	Storey	User code	Product	Status / Action	2D symbol	Object ID	Part type	Position	Apply	Warning
Electrical[E_Floor 1.dwg]	Floor 1	9	Loop Light Bet...				Luminaires	-1570, -...		
Electrical[E_Floor 1.dwg]	Floor 1	9	Loop Light Bet...				Luminaires	-908, -1...		
Electrical[E_Floor 1.dwg]	Floor 1	9	Loop Light Bet...				Luminaires	-1570, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5425, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5450, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5438, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5425, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5450, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-5438, -...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	-375, -7...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	1400, -7...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	3175, -7...		
Electrical[E_Floor 1.dwg]	Floor 1	10	BLUERMOTION		---		Luminaires	4950, -7...		
Electrical[E_Floor 1.dwg]	Floor 1	11	ZAPP 360		X		Luminaires	-2353, -...		
Electrical[E_Floor 1.dwg]	Floor 1	11	ZAPP 360		X		Luminaires	119, -44...		

After pressing OK, the objects which had the "Apply" checkbox checked will be copied/updated to the drawing, or removed from the drawing in case they didn't exist in the master DWG anymore and were marked to be removed.

Data of the objects (e.g. Object ID, Running Index) can be modified in the "slave" drawing too, and those can be then updated to the master drawing with the "Update Devices" function which has earlier been used only between system schematics and model drawings.

Dimension text gives a warning when it is not connected anywhere

When using the "Memo text" or "Prompt text" attributes in dimension texts and installing such in an empty place in a drawing, a warning will be given about it not connecting to any object. With this you can easily notice if you miss-click an object or forget to click an object, and the dimension text then won't get the correct layer as it was intended. This helps especially when creating layouts so that all the dimension texts which are wanted to be visible really are visible.



With the checkbox you can switch the warning off, but it can be switched back on from User Preferences.

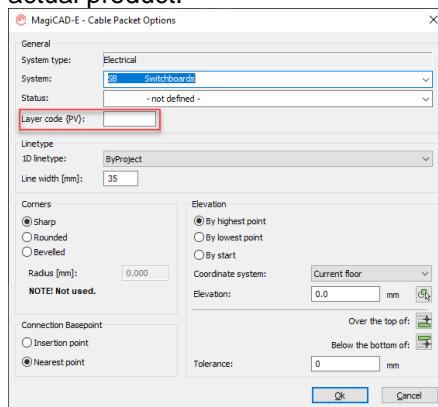


Improvements to Part Properties of Switchboards

Now when using the tabulator key, it will cycle through the dialog and will not get stuck anywhere. It is now also possible to move and input data in the list view by using only the keyboard. Enter will open a cell/dropdown menu and after modifying its data it will also be used to accept it. After accepting, the next cell/dropdown menu will be opened up for editing. While editing a cell or deciding a selection in a dropdown menu, pressing esc will reset the data but leave the dialog still open.

Layer code for cable packets

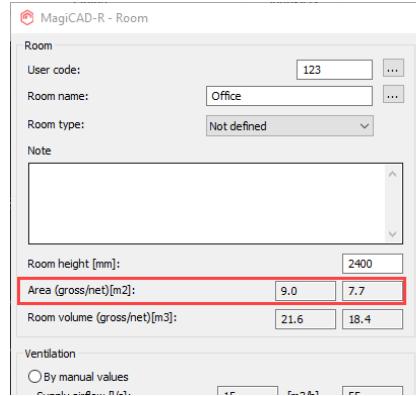
Now you can set a layer code {PV} for a cable packet and have it behaving in a similar way as an actual product.



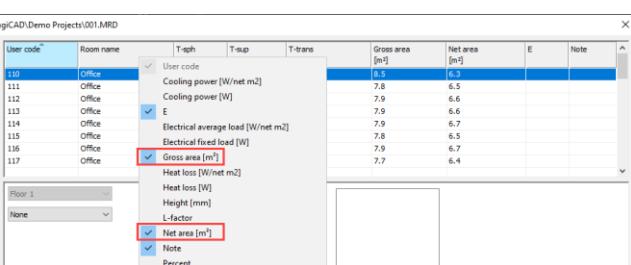
1.4 Room

Areas added to room list's attributes

Added "Gross area" and "Net area" columns to room list, which are also exported to Excel.



The screenshot shows the 'Room' dialog box. In the 'Area' section, there are two input fields labeled 'Area (gross/net)[m²]': one for '9.0' and another for '7.7'. These fields are highlighted with a red border.

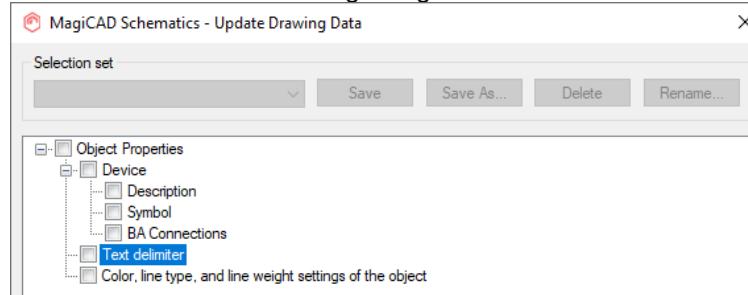


The screenshot shows the 'Project: Room Demoproject' dialog box. On the left, a tree view shows 'Rooms' under 'Floor 1'. On the right, a table lists rooms with columns: User code, Room name, T-eph, T-sup, T-trans, Gross area [m²], Net area [m²], E, and Note. The 'Gross area [m²]' and 'Net area [m²]’ columns are highlighted with blue borders. A context menu is open at the bottom right of the table, listing options: 'Gross area [m²]', 'Net area [m²]', 'Note', and 'Percent'. The 'Gross area [m²]' option is checked.

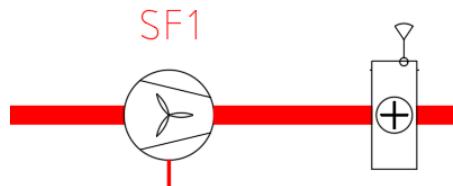
1.5 Schematics

New "Text delimiter"-option in Schematics Update Drawing Data dialog

A new update "Text delimiter" option has been added to Update Drawing Data, to update the delimiter which can be set in a drawing using AutoCAD's DIMSEP-command:



Estimated electric power: 4,2



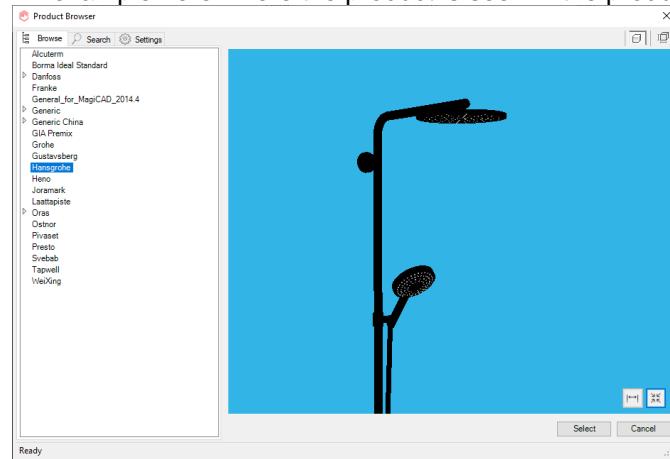
2 Resolved issues

2.1 Common

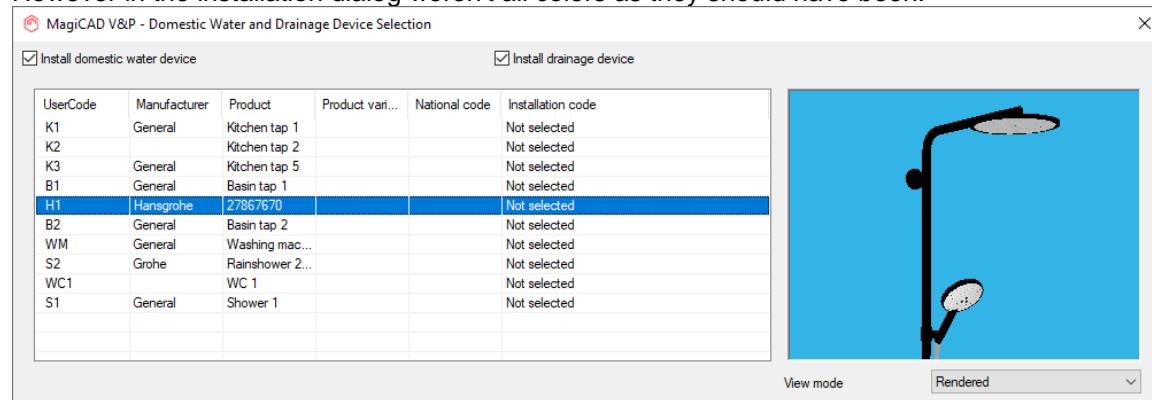
Properties window did not show mapped material correctly

The colors weren't correct in the preview in the installation dialog for some products.

An example here where the product is seen in the product browser:



However in the installation dialog weren't all colors as they should have been:



UserCode	Manufacturer	Product	Product vari...	National code	Installation code
K1	General	Kitchen tap 1			Not selected
K2		Kitchen tap 2			Not selected
K3	General	Kitchen tap 5			Not selected
B1	General	Basin tap 1			Not selected
H1	Hansgrohe	27867670			Not selected
B2	General	Basin tap 2			Not selected
WM	General	Washing mac...			Not selected
S2	Grohe	Rainshower 2...			Not selected
WC1		WC 1			Not selected
S1	General	Shower 1			Not selected

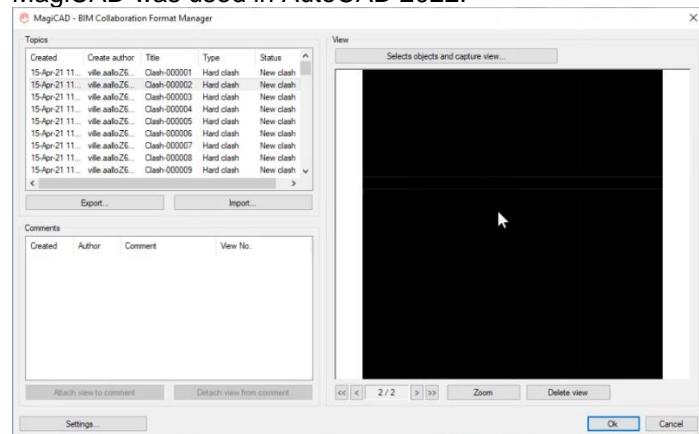
This has now been fixed and the material colors are shown correctly

Product selection dialog's 3D view had issues with some products

Some details were not shown properly on the preview for products. This has now been fixed.

Select Objects and capture view didn't work in BFC manager with AutoCAD 2022

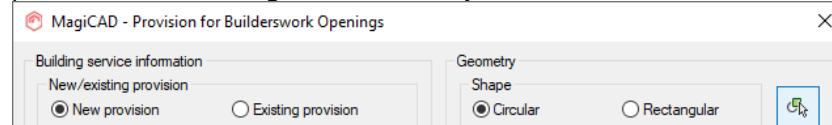
When attempting to capture a view, the user ended up with a black image for the selected view, when MagiCAD was used in AutoCAD 2022:



This has now been fixed and the view is properly captured.

Command line options in Provision for Builderswork openings were missing

Options which are needed for various workflows were missing when selecting to create manual provisions and reading in data from objects:



For example Xref was missing:

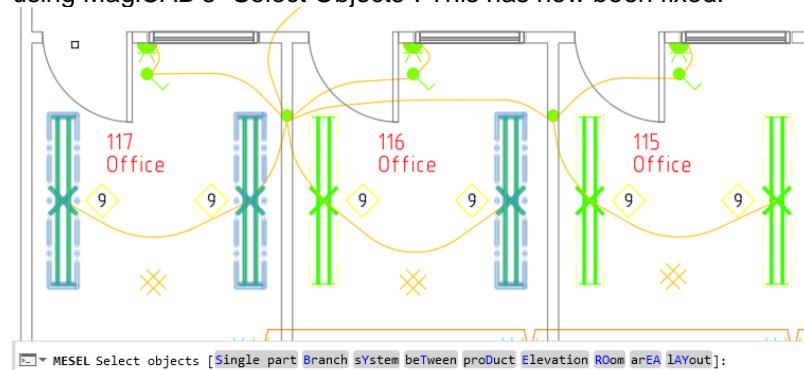
`MAGIVP Select part [Hpv on mCE on current Drawing on]:`

Now we have added AutoCAD objects and Xref:

`MAGIVP Select part [V&p on mCE on acAd off current Drawing on Xref off]:`

Deselecting objects, after having selected them using keywords, did not work

It wasn't possible to deselect objects after they had been selected using keywords, for example when using MagiCAD's "Select Objects". This has now been fixed.



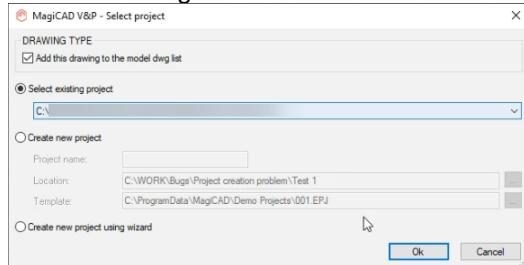
MagiCAD's Properties weren't exported to Navisworks if its own command was used in AutoCAD

MAGIPROPERTIESVISIBLE was not automatically ON and MagiCAD Properties weren't exported to Naviswork if its own command, instead of MagiCAD's "Navisworks Export" command, was used
Now the NWCOUT command exports MagiCAD Properties as well.

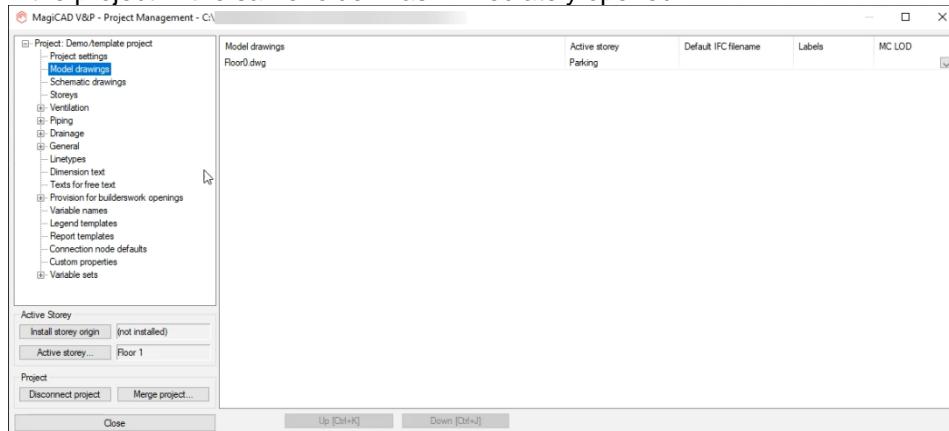
2.2 Ventilaion and Piping

Project creation issue when creating and saving drawings and then selecting to open the project

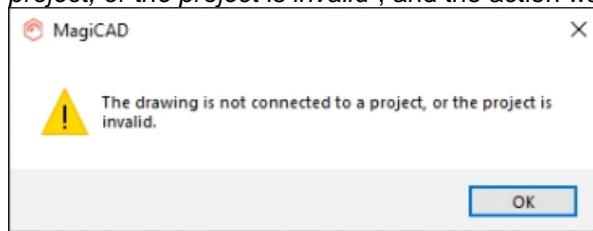
When creating a project and then selecting "Project" under the General-tab, instead of the project selection dialog...



...the project in the same folder was immediately opened:



It was then possible to attach the drawing and set its floor and offsets, but then when for example trying to run an IFC Export, the following message was shown "*The drawing is not connected to a project, or the project is invalid*", and the action was not possible to perform:

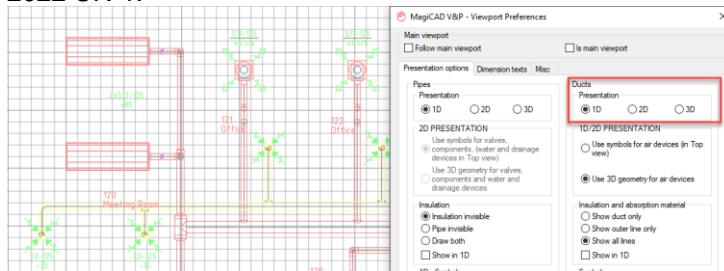


This has now been fixed and the project selection dialog is opened first if the drawing isn't connected to a project.

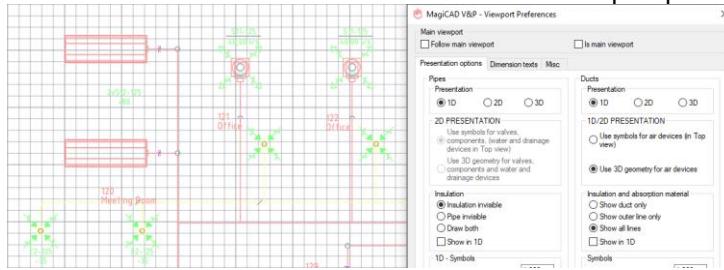
Viewport Preferences didn't work on an Xref-drawing

When working on a drawing, which itself wasn't connected to a MagiCAD project but had an Xref-ed drawing from a MagiCAD project, the viewport settings didn't work in 2022 UR-1 like they had in earlier versions:

2022 UR-1:

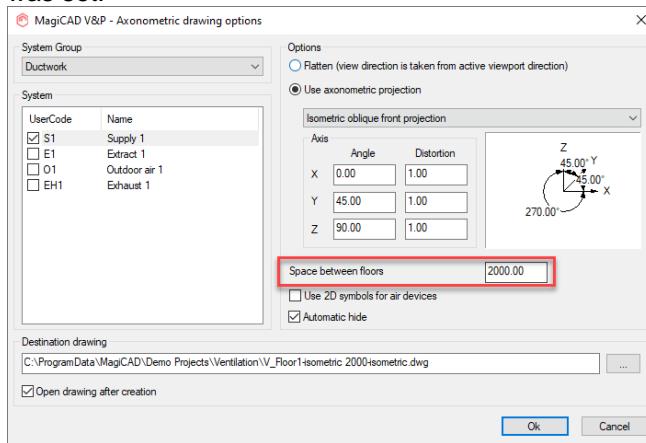


Now this has been fixed in 2022 UR-2 and the viewport preferences work correctly in this case as well:



Axonometric drawing did not show pipe/duct between connection nodes

The axonometric drawing did not add the line in between floors like it should have when this setting was set:



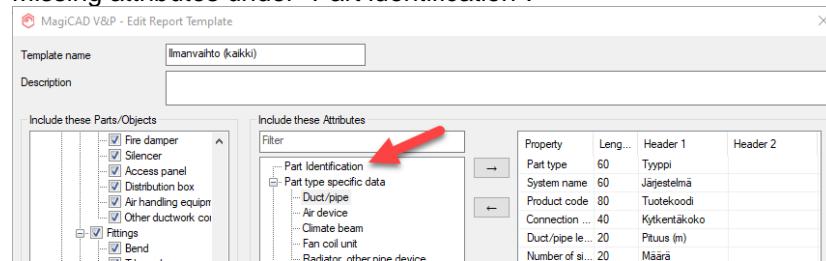
Couldn't modify Report or Legend templates with separate "Edit Project" applications

Due to some missing attributes it wasn't possible to edit these in the Report/Legend templates with the "Edit project" applications:

MagiCAD > MagiCAD for AutoCAD - Utilities

Name	Date modified	Type	Size
Edit Electrical Project	11.11.2021 10:34	Shortcut	2 KB
Edit Room Project	11.11.2021 10:34	Shortcut	2 KB
Edit Schematics Dataset	11.11.2021 10:34	Shortcut	2 KB
Edit Ventilation and Piping Project	11.11.2021 10:34	Shortcut	2 KB
MagiCAD User Settings	11.11.2021 10:34	Shortcut	2 KB

Missing attributes under "Part identification".



Now the missing attributes have been added so that they work in these applications as well.

Printing the sprinkler report to PDF caused the program to crash if the filename was too long

Depending on the driver to print to PDF the program can give the calculated sprinkler area's name as a filename. In case this was too long, the program crashed.

Now the suggested name is shortened if it is too long (> 31 characters) for the program to handle.

Object selection crashed in some cases

In some rare case the object selection crashed due an internal error, and reducers were also in some cases moved to the wrong elevation.

These issues with object selection have now been fixed.

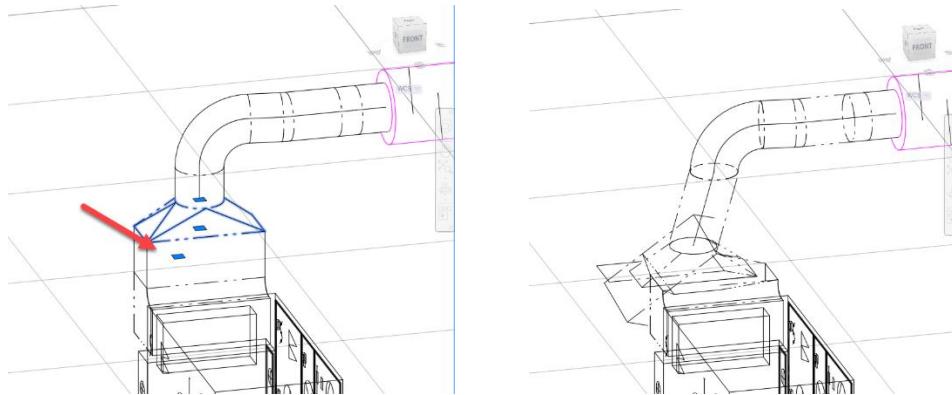
Products were inserted with preview mode, using the COM interface

Now when setting the product through COM, the product's detail mode is set correctly, if it has MC LOD-levels.

Reduction shifted its origin

In some cases unaligned products were warped after sizing.

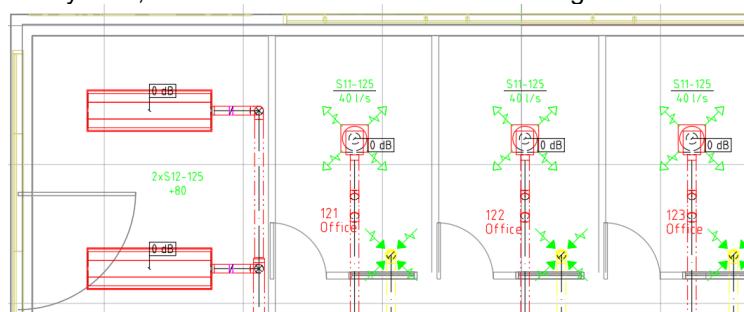
For example here the center point of the reduction had been shifted from its origin which caused issues with the sizing:



This has now been fixed and the sizing function handles these situations so that the parts don't break.

"Sound Calculation of All Routes" failed in some cases

The "Sound Calculation of All Routes"-function failed if the user first ran the "Balancing"-function for the system, and the result was that the devices got the sound level 0dB

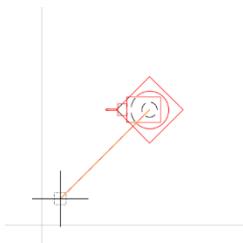


This has now been fixed and the sound calculation works again, also when the balancing is run first on its own, before running "Sound Calculation of All Routes".

Grill direction for air device reset the rotation while placing devices

If the user set the grille direction by right-clicking and selecting "Grille direction" and then installing the device, the direction was reset for the next installation.

So it wasn't possible to rotate it and then install a number of similar ones in a row, as the rotation had to be set individually for each and every one of them before installing.



Next one back to what was set in the installation dialog:



Now the grille direction is remembered between installations during the same command.

The pressure drop of a branch was calculated incorrectly if the main duct had an absorption series set to it

In case there was a branch which connected to a duct with a tap, the absorption series of the big duct was inherited to the tap.

Example issue: In user case the side duct was 125 mm and inside insulation on the main duct is 50 mm.

Thus the inside diameter of the side duct is only 25 mm in calculation which leads to very high velocity and pressure drop.

Now the inside insulation is not inherited to the side branch or tap.

No error message was given if the pressure at the connection node was over the limit

Added "Not in balance"-message in balancing for the connection nodes in ventilation systems.

Does not work in "Extended flow analysis". The reason for this is that at air terminals the message is shown when the report is opened, but when the calculation button is pressed once it disappears also from the air terminals.

Rect/rect outlets were drawn incorrectly, if outlets which break the duct were used

The wrong type of outlets were drawn for rect/rect ducts, when the outlet which break the ducts was used.

This has now been fixed and the outlets are drawn correctly.

Installation dialog sorting issue for access panels

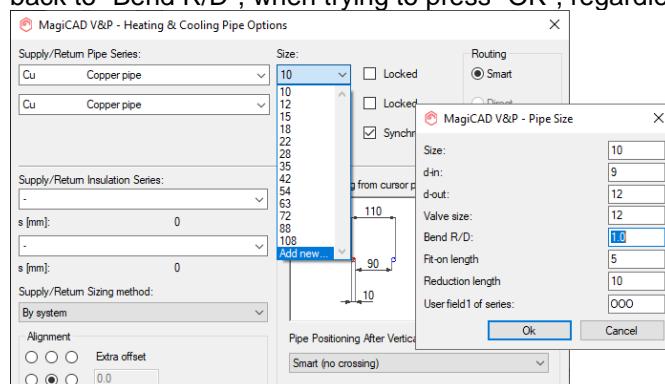
Sorting did not work properly for the access panels, with the preview being wrong for the listed products after sorting. This has now been fixed.

"Mixed system type" issue when Jeven kitchen devices were used

Fixed a "Mixed system type" issue related to Jeven kitchen devices

It wasn't possible to create a new pipe series in the drawing dialog

When trying to add a new pipe series size in the drawing dialog, the option got stuck and prompted back to "Bend R/D", when trying to press "OK", regardless of what the user had set.



This has now been fixed and the user can select a size normally. The dialog has also been updated:



hRadiatorCoupling was not part of the COM interface

When trying to get the /part/qpdclass/name from a radiator connection set it didn't work, because the definition was missing from the COM interface:

This could be seen when trying to get the value using "MCGETVAR". Here can be seen the difference between a radiator connection set, which returns nothing and a radiator which returns the radiator type:

```
Command: MCGETVAR
[Part handle]:87D0
[Attribute name]:/part/qpdclass/name
Command: MCGETVAR
[Part handle]:87CF
[Attribute name]:/part/qpdclass/name
hRadiatorType
```

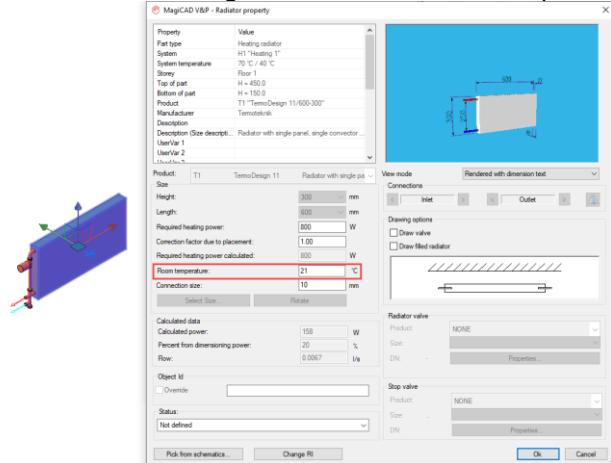
Note: The part handle of an object can be found using the "LIST" command:

```
Command: LIST
Select objects: 1 found
Select objects:
Layer : PIPE-H1-COMPONENT-
Handle : 87D0
Position : X=8137.1251 Y=5524.7604 Z= 118.9000
Direction : X= 1.0000 Y= 0.0000 Z= 0.0000
Normal : X= 0.0000 Y= 0.0000 Z= 1.0000
Ports : (2)
Port[0] : X=8112.1251 Y=5524.7604 Z= 148.9000
Connected to : 87D2
Direction : X= 0.0000 Y= 0.0000 Z= 1.0000
Normal : X= 1.0000 Y= 0.0000 Z= 0.0000
```

Radiator connection set caused the temperature, which was set for the radiator, to always reset to what it was during the installation

If the radiator had a radiator connection set connected to it, then the room temperature couldn't be changed, and always reset to this value when the user tried to change it.

This has been changed and now the room temperature can be changed and it is correctly updated:



It was possible to connect return pipe to supply connection

Fixed a bug where user was able to connect to a Supply connection with a Return pipe

Find & Replace of device failed in some pipe connection cases

Fixed a bug in Find & Replace where it replaced a device, but left it half connected to pipes.

This made it look like it was fully connected and the replacement was successful, but for example flow sum calculations threw an error.

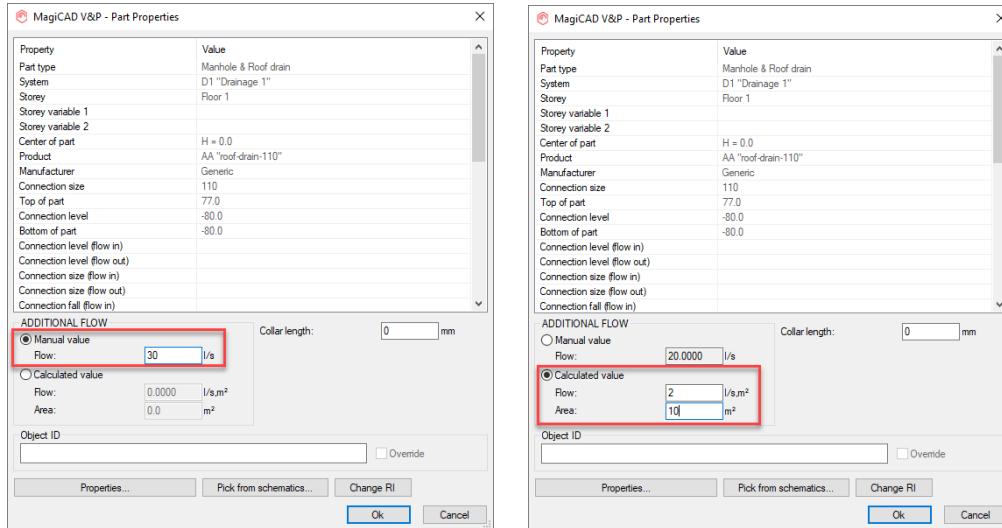
Manifold was erased with certain pipe drawing order

When starting to draw directly from a manifold some of the wrong options, like "connection node", were shown. Selecting "connection node" led in this case to the manifold disappearing.

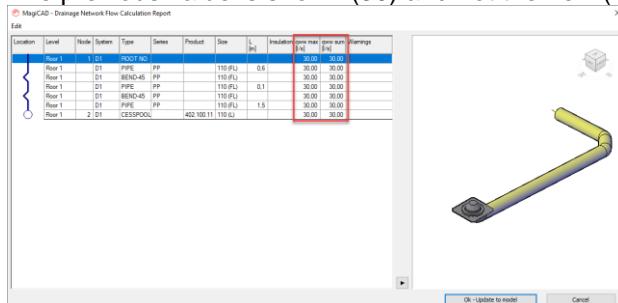
Now only the correct options are shown.

Calculated value of roof drain was not updated after calculations

The calculated value wasn't properly updated in roof drains and did only use the previously set and saved manual value.



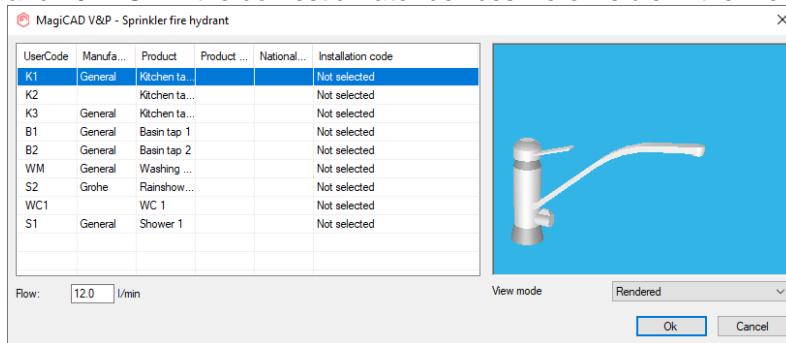
The previous value is shown (30) and not the new (20), in this example:



Now the calculated values are correctly updated and saved in Part Properties.

Fire hydrant installation dialog list did also show domestic water devices

Due to the fact that fire hydrants can be installed in domestic water systems, those product types are visible in the domestic water device installation dialog list as well. But due to a bug in MagiCAD 2022 and 2022 UR-1 the domestic water devices were visible in the fire hydrants' installation dialog as well:

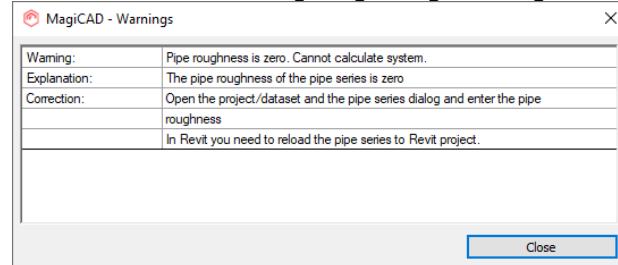


This has now been fixed and domestic water devices are no longer visible in the fire hydrant installation dialog.

Sprinkler calculation with Darcy-Weisbach didn't show what the issue was if the roughness was 0

The sprinkler calculation stopped while calculating the sprinkler network, if the roughness of the pipes was set as 0 in the pipe series, without indicating why the calculation stopped.

Now a corrected message regarding the roughness is given:



Sprinkler report showed an unnecessary message about high velocity

When calculating multiple zones at the same time, the warnings from another zone's calculations showed up in other zones' lists.

Here the limit is set to 10 m/s yet a warning is given, even if the velocity is at 0.8 m/s way below that limit:

Level	From	To	k-fact	Cfact	Height [m]	qv [min]	v [m/s]	Size [mm]	L [m]	Lev	Parts	User code	p_start [mbar]	p_end [mbar]	dpt [mbar]	dp_Hst [mbar]	dp_Fst [mbar]	Warnings
Floor 1	13	12	120	11.8	173.6	0.7	70.30	0.6	0.6			10782	10835	-53	-54	1	1.2	
Floor 1	14	13	120	12.3	173.6	2.7	37.20	4.0	6.5	1xB90		10958	10782	176		176	44.5	
Floor 1	15	14	120	12.3	173.6	1.2	54.50	0.7	3.7	1xT		11047	10958	89	73	15	20.5	
Floor 1	15	19	120	11.6	141.4	1.0	54.50	3.5	3.5			11047	11030	17	7	10	2.9	
Floor 1	16	15	120	11.6	315.0	2.3	54.50	3.5	3.5			11097	11047	50	7	44	12.6	
Floor 1	16	17	120	12.3	199.5	1.4	54.50	0.7	3.7	1xT		11097	11004	93	73	20	26.5	
Floor 1	17	18	120	12.3	199.5	3.1	37.20	4.0	6.5	1xB90		10776	10776	228		228	57.5	
Floor 1	18	19	120	12.3	199.5	0.9	37.20	0.6	0.6			10776	10625	-53	-54	1	1.6	
Floor 1	19	20	120	12.4	86.0	0.6	54.50	0.7	3.7	1xT		11039	10933	73	1	4	5.5	
Floor 1	19	30	120	11.7	84.4	0.8	37.20	3.5	3.5			11093	11012	16	11	3.3	vmax	
Floor 1	20	25	120	12.4	86.0	1.3	37.20	4.0	6.5	1xB90		10952	10916	34		34	8.5	
Floor 1	25	26	120	11.8	86.0	3.7	22.30	0.6	1.6	1xB90		10919	10931	87	-54	141	256.4	
Floor 1	26	12	120	11.8	141.4	0.6	70.30	3.5	3.5			10831	10933	-4	-7	3	0.8	

Here can be seen that this warning came from Zone 4's calculations:

Level	From	To	k-fact	Cfact	Height [m]	qv [min]	v [m/s]	Size [mm]	L [m]	Lev	Parts	User code	p_start [mbar]	p_end [mbar]	dpt [mbar]	dp_Hst [mbar]	dp_Fst [mbar]	Warnings
Floor 1	12	13	120	12.2	272.4	1.2	70.30	0.6	1.4	1xT		4672	4699	96	54	12	22.1	
Floor 1	12	26	120	11.8	460.6	2.0	70.30	3.5	3.5			4672	4640	32	7	26	7.4	
Floor 1	13	14	120	12.3	272.4	4.2	37.20	4.0	6.5	1xB90		4696	4201	405		405	102.3	
Floor 1	14	15	120	11.6	272.4	1.9	54.50	0.7	0.7			4201	4267	-66	-73	7	9.6	
Floor 1	15	19	120	11.6	123.2	8.8	54.50	3.5	3.5			4267	3716	551	7	545	157.4	
Floor 1	16	15	120	11.6	960.2	6.9	54.50	3.5	3.5			4617	4267	350	7	343	99.2	
Floor 1	17	16	120	11.5	150.6	1.1	54.50	0.7	0.7			4546	4617	-71	-73	2	3.2	
Floor 1	18	17	120	12.3	150.5	2.3	37.20	4.0	6.5	1xB90		4681	4546	135		135	34.1	
Floor 1	19	20	120	12.4	487.3	3.5	37.20	0.7	3.7	1xT		3716	3539	177	73	103	138.3	
Floor 1	20	21	120	12.4	487.3	7.5	37.20	0.7	1.4	1xB90		3539	3283	1386	7	1379	398.6	
Floor 1	21	22	200	120	11.8	344.2	5.3	37.20	0.8	1.4	1xB90, 1xT		3283	2962	321	-58	379	473.9
Floor 1	21	23	120	12.4	143.1	2.2	37.20	2.3	2.3			3283	3239	44		44	18.8	

This has now been corrected and warning-messages from one zone's calculations don't show up in the reports for other zones.

Sideways-sprinkler connection fixed

The sideways-sprinkler connection had stopped working, and this issue has been fixed now

Issue with Automatic Text for fire hydrant in sprinkler networks

Due to fire hydrants being products which can be installed to both sprinkler systems and domestic water systems, did an issue arise where the automatic dimension text for was not installed to fire hydrants if they were installed to sprinkler systems.

Now automatic dimension text for domestic water devices is always installed to fire hydrants.

2.3 Electrical

Problems with showing proxy graphics

If devices in viewport settings were set to draw "2+3D", MagiCAD drew circle when generating proxy graphics for an entity. Now graphics are looking correct.

Dummy graphics (circle) in "1wcs=1m" dwg are now scaled

AutoCAD blocks had scaling issue when exported to IFC

When the drawing was done in "wcs=1m" and there were products that have AutoCAD block as a 3D symbol, IFC export didn't scale those devices properly.

Now all devices are in correct scaling when exporting to IFC.

Local product database path

When defining the path to local product databases in the Product Browser, MagiCAD now remembers the last used path even after re-starting MagiCAD.

Pick from system schematic

After using the "Pick from system schematic" function in device installation, quick keys to rotate and connect/noconnect didn't work. Now quick keys are working normally.

Number of Elements saved only into current dwg from ELV connection reports

When running ELV connection reports, the "Number of Elements" property was saved only to host objects in the current drawing. Now it is saved also to objects in other drawings.

Host connection bugs in combination boxes

ELV devices inside combination boxes didn't show up in connection reports when they had been logically connected to a host or the connection was determined by using the "host by area" checkbox. Now ELV devices inside combination boxes are visible in connection reports.

Previously, also the Update DWG function reset host references from ELV devices inside combination boxes which were using the "host by area" checkbox. Now those devices are updated correctly.

Switchboard connection bugs in combination boxes

When using the "switchboard by area" checkbox for electrical devices inside combination boxes, their power was not summarized to the switchboards in power calculations. This issue is now fixed. Default power and load type from the project are used when calculating.

Switchboard selection problem when a cable packet was connected to a dummy switchboard

When a cable packet had been connected to a switchboard which was marked to be a "dummy", connecting circuits to the cable packet tried to connect them also to the dummy switchboard. After this, running Part Properties on the circuit reset its switchboard selection. Now circuits no longer try to connect to dummy switchboards.

Connected "circuit symbol lines" not following switchboards/hosts properly

Now when a host device is moved, rotated or its elevation is changed, also all connected "circuit symbol lines" will follow.

Now when a switchboard is moved, rotated, its elevation is changed or its dimensions is changed, also all connected "circuit symbol lines" will follow.

Previously in some cases this did not happen.

Too low limited peak current values in short-circuit calculations

When using protective devices which limit the peak current values (shown in the Ip_lim column), sometimes it limited the current too much.

Now if "Ip lim" is less than "Ik3p", then "Ip lim" is set to "Ik3p". This means that limiting will not occur after reaching the calculated L-L-L RMS value.

Connection nodes no longer inherit PV from cable/etc it was created from

When creating connection nodes from cable, cable trays etc. it gets the layer from the object it was created. However, it didn't get value from PV to the layer of connection node even if it was used for the cable, cable tray etc.

Now layer of the connection node is identical to the layer of the object it was created from.

2.4 Circuit designer

Change Properties

Previously Change Properties was not able to update a changed child part symbol also into its mother. Now it will do so.

Layouts

Previously in some cases there were multiple viewports created on the first layout when running the Layout function.

2.5 Room

IfcSpaces created with MagiCAD for Revit couldn't be imported to MagiCAD Room

Due to changes in MagiCAD for Revit 2022 UR-1 spaces exported from that platform could no longer be imported into MagiCAD Room.

MagiCAD Room's IFC Import has now been improved to handle these updated spaces.

2.6 Schematics

"Edit Schematics Dataset" crashed when opening dataset and selecting report definitions

The "Edit Schematics Dataset"-function crashed when opening a dataset and selecting report definitions, when the dataset wasn't connected to a drawing.

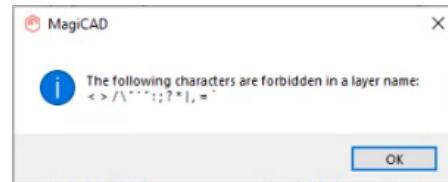
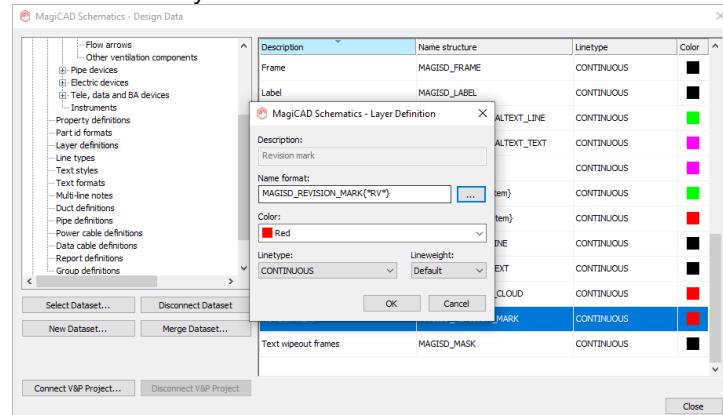
This has now been fixed and a crash will not occur if the dataset isn't connected to a drawing.

MagiCAD > MagiCAD for AutoCAD - Utilities

Name	Date modified	Type	Size
Edit Electrical Project	14.10.2021 12:31	Shortcut	2 KB
Edit Room Project	14.10.2021 12:31	Shortcut	2 KB
Edit Schematics Dataset	14.10.2021 12:31	Shortcut	2 KB
Edit Ventilation and Piping Project	14.10.2021 12:31	Shortcut	2 KB
MagiCAD User Settings	14.10.2021 12:31	Shortcut	2 KB

Impossible to use Revision name variable in layer name format

If layer definition had some standard property in its name MagiCAD showed error about invalid characters in layer name.



This has now been fixed and standard properties can now be used without causing an error.