



MagiCAD for BricsCAD

Release notes for version 2025 UR-2

07/02/2025

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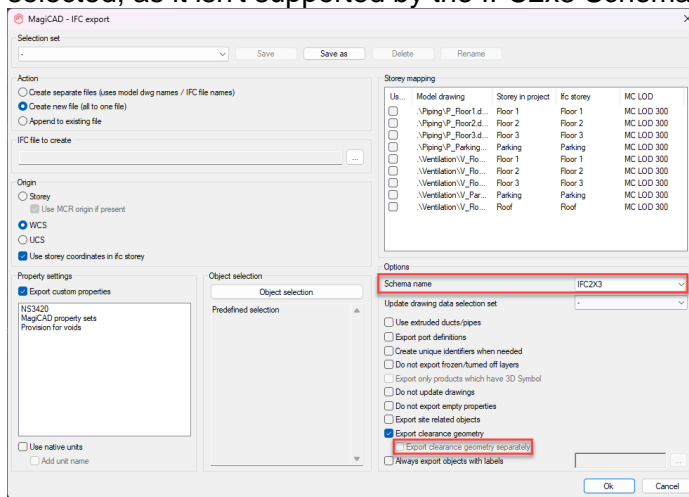
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1 New features

1.1 Common

Disabled the "Export clearance geometry separately"-option when IFC2x3 is selected

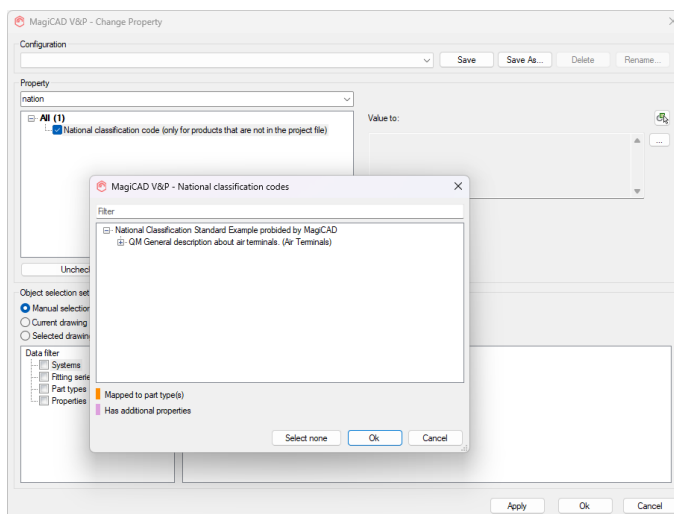
"Export clearance geometry separately"-option has been disabled when IFC2x3 is selected, as it isn't supported by the IFC2x3 Schema:



Possibility to change National classification code using change properties

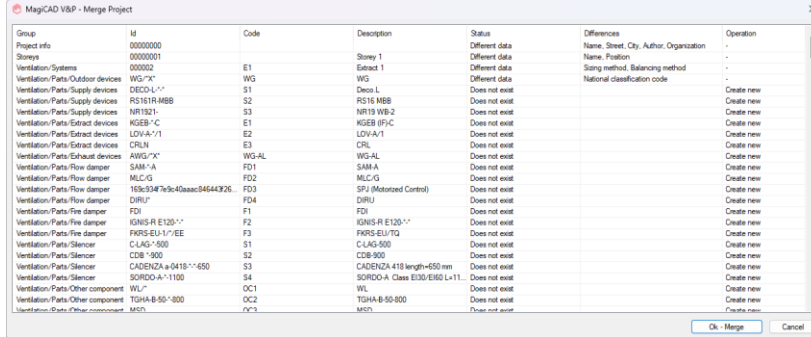
National classification codes can now be set using Change Properties for generic objects which are created in the drawings and aren't part of the project files:

1. Distribution boxes
2. Generic manifolds
3. Generic manholes
4. Generic heating & cooling plants
5. Switchboards



Maintain column widths and dialog size in Merge Project

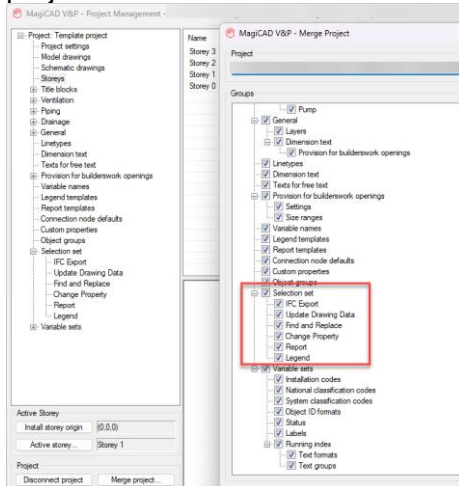
The column widths and the dialog size are now maintained when merging a project:



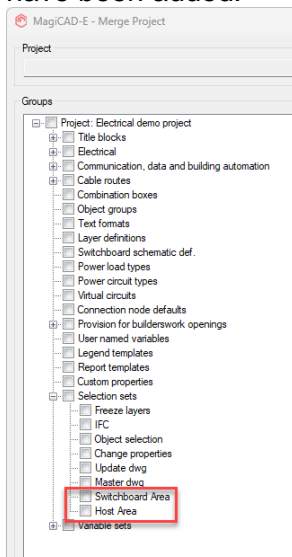
| Group | Id | Code | Description | Status | Differences | Operation |
|-----------------------------------|--------------------------|-------|-------------------------------|----------------|----------------|------------------------------------------|
| Project info | 00000000 | | | | Different data | Name, Street, City, Author, Organization |
| Stores | 00000001 | | Storey 1 | | Different data | Name, Position |
| Ventilation/Systems | 00000002 | E1 | Extract 1 | | Different data | Sizing method, Balancing method |
| Ventilation/Parts/Outdoor devices | WG/*X* | WG | WG | | Different data | National classification code |
| Ventilation/Parts/Supply devices | DECO-L/* | S1 | Deco L | Does not exist | | Create new |
| Ventilation/Parts/Supply devices | RS191R-M8B | S2 | RS191R-M8B | Does not exist | | Create new |
| Ventilation/Parts/Supply devices | NR1921- | S3 | NR1919-WB-2 | Does not exist | | Create new |
| Ventilation/Parts/Extract devices | KGEB-C | E1 | KGEB (F)*C | Does not exist | | Create new |
| Ventilation/Parts/Extract devices | LDV-A/*Y1 | E2 | LDV-A*1 | Does not exist | | Create new |
| Ventilation/Parts/Extract devices | CRN | E3 | CR* | Does not exist | | Create new |
| Ventilation/Parts/Exhaust devices | AWG/*X* | WG-AL | WG-AL | Does not exist | | Create new |
| Ventilation/Parts/Flow damper | SAM/*A | FD1 | SAM A | Does not exist | | Create new |
| Ventilation/Parts/Flow damper | M&C/G | FD2 | M&C/G | Does not exist | | Create new |
| Ventilation/Parts/Flow damper | 16i3347e5c40baac84644326 | FD3 | SPJ (Motorized Control) | Does not exist | | Create new |
| Ventilation/Parts/Flow damper | DIRU/* | FD4 | DIRU | Does not exist | | Create new |
| Ventilation/Parts/Flow damper | FDI | F1 | FDI | Does not exist | | Create new |
| Ventilation/Parts/Free damper | IGNIS-R E120-/* | F2 | IGNIS-R E120-/* | Does not exist | | Create new |
| Ventilation/Parts/Free damper | FKRS-EU1/*EE | F3 | FKRS-EU1TG | Does not exist | | Create new |
| Ventilation/Parts/Slencer | CLUG-1500 | S1 | CLUG-800 | Does not exist | | Create new |
| Ventilation/Parts/Slencer | CDB-900 | S2 | CDB-900 | Does not exist | | Create new |
| Ventilation/Parts/Slencer | CADENZA a 0418-/*650 | S3 | CADENZA 418 length=650 mm | Does not exist | | Create new |
| Ventilation/Parts/Slencer | SCORDO-A-1100 | S4 | SCORDO-A Class E130/E50 L=11. | Does not exist | | Create new |
| Ventilation/Parts/Other component | WL/* | OC1 | WL | Does not exist | | Create new |
| Ventilation/Parts/Other component | TGHA-B-50-800 | OC2 | TGHA-B-50-800 | Does not exist | | Create new |
| Ventilation/Parts/Other component | MEN | OC3 | MEN | Does not exist | | Create new |

Selection sets in project merge

The following selection sets from the various functions have been added in Merge project in V&P:



In Electrical did this feature exist earlier and now Switchboard Area and Host Area have been added:

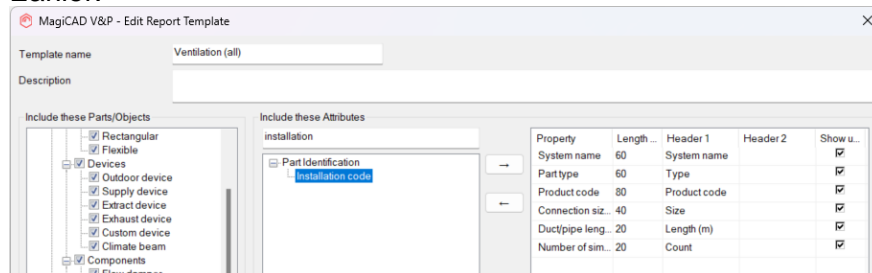


Installation code description in the Report template

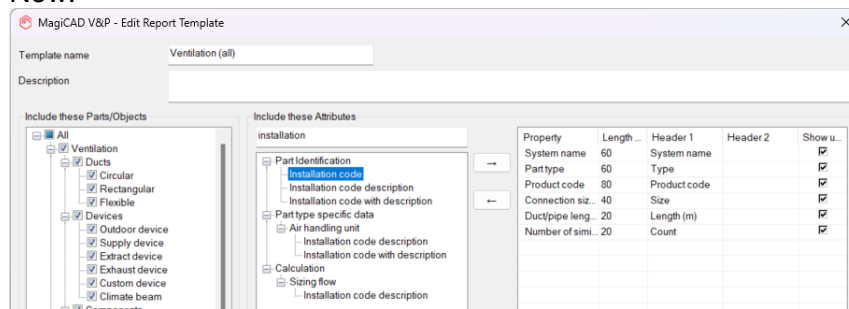
Earlier it was only possible to add the Installation code in most reporting functions. Now this has been updated so that the description can be added as well, as well as the code and description together:

Example in Report.

Earlier:



Now:



Merge should automatically suggest the first identical item it finds

If there is only one identical item in the project when merging, it now automatically suggest to map the current item to it.

Different merging cases:

1. Same ID + same data (=same product) -> keep as is
2. Same ID + different data (but is still same product) -> no default action ready, user decides (only map or map and overwrite)
3. Same ID + different data (but is different product, identical NOT found with other id) -> no default action ready, user decides (how to add or if possible to map anyway (some almost identical is found))
4. Same ID + different data (but is different product, identical IS found with other id) -> map to identical as default
5. New ID (identical IS found with other ID) -> map to identical as default
6. New ID (identical NOT found with other ID) -> add with original ID
7. New ID (identical NOT found with other ID) -> create new with new ID

Use ESC to accept drawn line in MagiCAD Schematics and Electric

When drawing lines/wires in electrical, circuit designer or schematics and pressing ESC-key, now it no longer cancels what you have drawn but leaves them in the drawing.

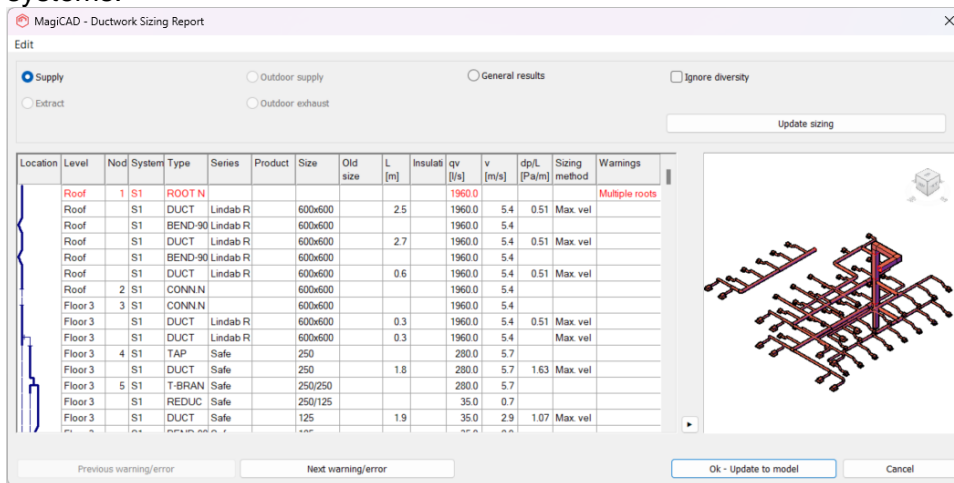
1.2 Ventilation and Piping

Common

Warning if system consists more than one network

In some cases users didn't correctly connect all parts of the network to the main network, and didn't notice that the system had multiple roots.

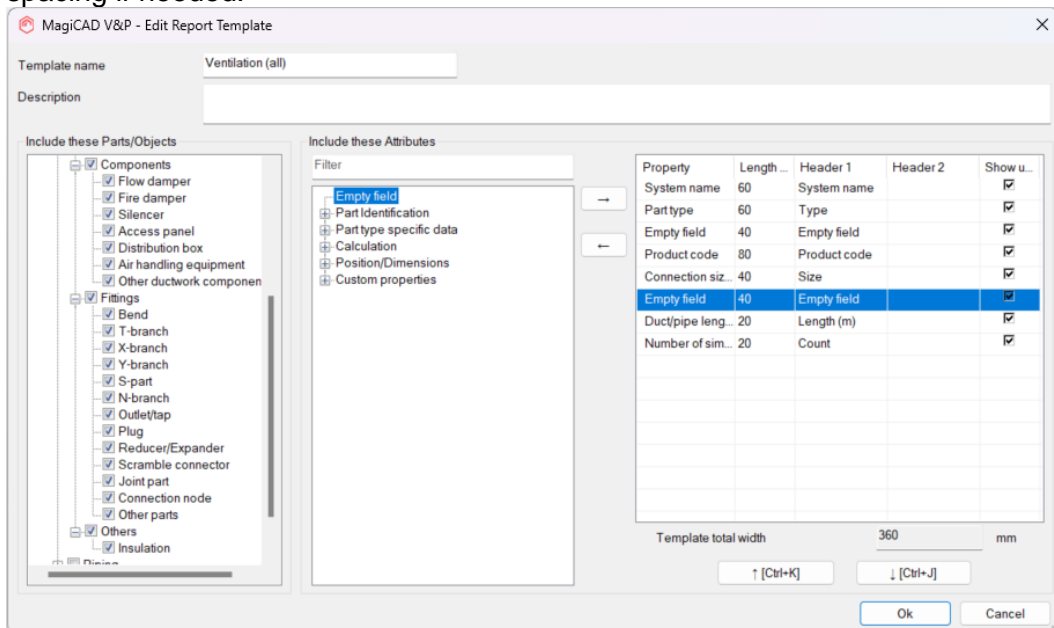
We have now added a warning so that users will notice this when calculating the systems:



| Location | Level | Nod | System | Type | Series | Product | Size | Old size | L [m] | Insulat | qv [l/s] | v [m/s] | dp/L [Pa/m] | Sizing method | Warnings |
|----------|-------|-----|---------|----------|--------|---------|------|----------|-------|---------|----------|---------|-------------|---------------|----------------|
| Roof | 1 | S1 | ROOT N | | | | | | | | 1950.0 | | | | Multiple roots |
| Roof | | S1 | DUCT | Lindab R | | 600x600 | | | 2.5 | | 1950.0 | 5.4 | 0.51 | Max vel | |
| Roof | | S1 | BEND-90 | Lindab R | | 600x600 | | | | | 1950.0 | 5.4 | | | |
| Roof | | S1 | DUCT | Lindab R | | 600x600 | | | 2.7 | | 1950.0 | 5.4 | 0.51 | Max vel | |
| Roof | | S1 | BEND-90 | Lindab R | | 600x600 | | | | | 1950.0 | 5.4 | | | |
| Roof | | S1 | DUCT | Lindab R | | 600x600 | | | 0.6 | | 1950.0 | 5.4 | 0.51 | Max vel | |
| Roof | | S1 | DUCT | Lindab R | | 600x600 | | | | | 1950.0 | 5.4 | | | |
| Floor 3 | 2 | S1 | CONN N | | | 600x600 | | | | | 1950.0 | 5.4 | | | |
| Floor 3 | 3 | S1 | CONN N | | | 600x600 | | | | | 1950.0 | 5.4 | | | |
| Floor 3 | | S1 | DUCT | Lindab R | | 600x600 | | | 0.3 | | 1950.0 | 5.4 | 0.51 | Max vel | |
| Floor 3 | | S1 | DUCT | Lindab R | | 600x600 | | | 0.3 | | 1950.0 | 5.4 | | Max vel | |
| Floor 3 | 4 | S1 | TAP | Safe | | 250 | | | 250 | | 200.0 | 5.7 | | | |
| Floor 3 | | S1 | DUCT | Safe | | 250 | | | 1.8 | | 200.0 | 5.7 | 1.63 | Max vel | |
| Floor 3 | 5 | S1 | T-BRAN | Safe | | 250/250 | | | | | 200.0 | 5.7 | | | |
| Floor 3 | | S1 | REDUC | Safe | | 250/125 | | | | | 35.0 | 0.7 | | | |
| Floor 3 | | S1 | DUCT | Safe | | 125 | | | 1.9 | | 35.0 | 2.9 | 1.07 | Max vel | |

Empty field to report

It is now possible to add empty columns, like in Electrical, in reports, to add column spacing if needed:



Template name: Ventilation (all)

Description:

Include these Parts/Objects:

- Components
 - Flow damper
 - Fire damper
 - Silencer
 - Access panel
 - Distribution box
 - Air handling equipment
 - Other ductwork componen
- Fittings
 - Bend
 - T-branch
 - X-branch
 - Y-branch
 - S-part
 - N-branch
 - Outlet/tap
 - Plug
 - Reducer/Expander
 - Scramble connector
 - Joint part
 - Connection node
 - Other parts
- Others
 - Insulation

Include these Attributes:

Filter:

- Empty field
- Part Identification
- Part type specific data
- Calculation
- Position/Dimensions
- Custom properties

| Property | Length... | Header 1 | Header 2 | Show u... |
|-------------------|-----------|--------------|----------|-------------------------------------|
| System name | 60 | System name | | <input checked="" type="checkbox"/> |
| Part type | 60 | Type | | <input checked="" type="checkbox"/> |
| Empty field | 40 | Empty field | | <input checked="" type="checkbox"/> |
| Product code | 80 | Product code | | <input checked="" type="checkbox"/> |
| Connection siz... | 40 | Size | | <input checked="" type="checkbox"/> |
| Empty field | 40 | Empty field | | <input checked="" type="checkbox"/> |
| Duct/pipe leng... | 20 | Length (m) | | <input checked="" type="checkbox"/> |
| Number of sim... | 20 | Count | | <input checked="" type="checkbox"/> |

Template total width: 360 mm

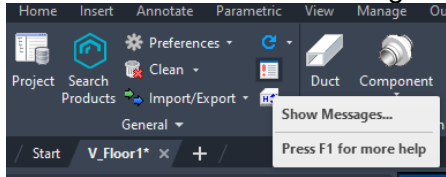
↑ [Ctrl+K] ↓ [Ctrl+J]

Ok Cancel

Need to run balance again after opening the "Show messages"-dialog

Earlier, after having run the sound calculations, and clicking "Show messages" the data from the balancing of the system was cleared and you had to re-run the balancing function to get the results of the sound calculations.

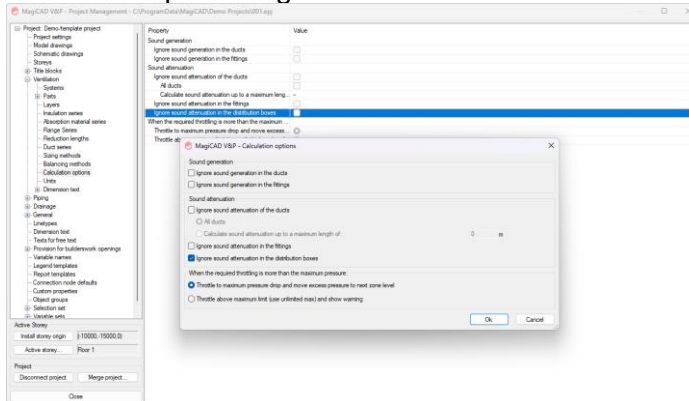
Now the data for the balancing isn't cleared when clicking "Show messages".



Ventilation

Ignore sound in distribution boxes

Added the option to ignore attenuation of distribution boxes:

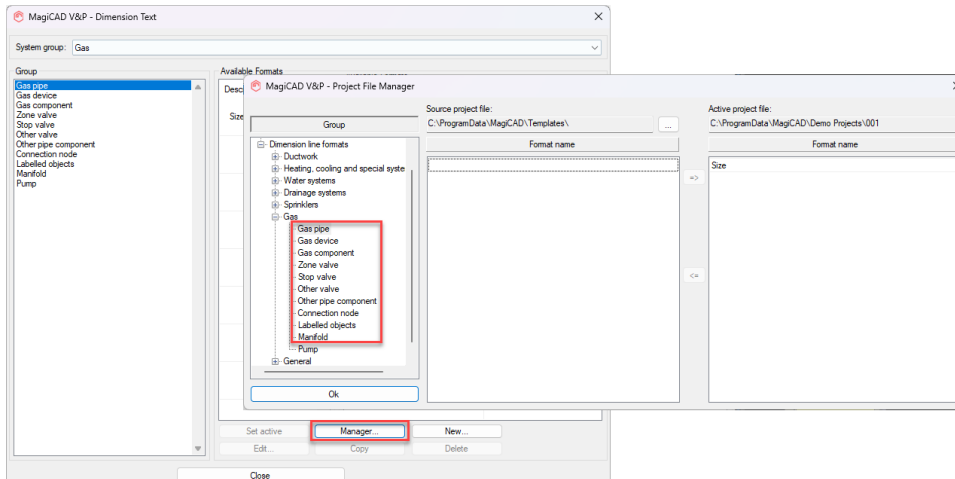


Gas systems

Ability to import Dimension text formats for Gas system groups using Manager

When selecting "Manager" in the Automatic Text's dialog, all the categories for gas, but "Pump", were missing.

All these have now been added:



1.3 Electrical

Improved Create Similar of cables

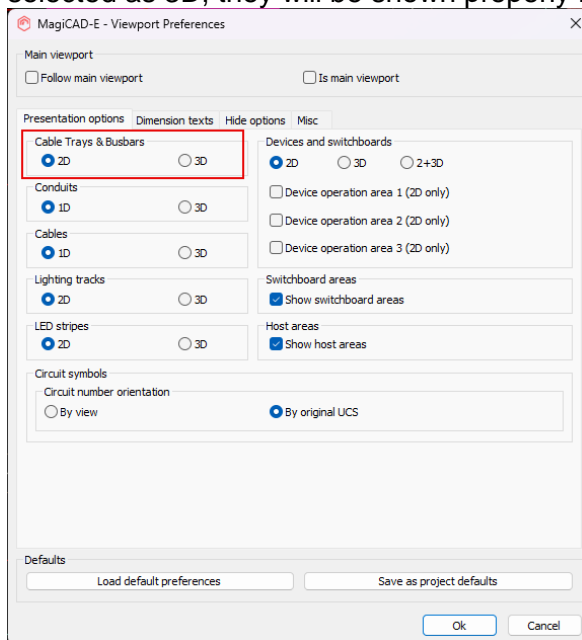
When creating new cable or cable packet from create similar button (grip point *) it takes all the settings from that cable. Previously connection box, elevation and device base point were default values, not from the selected object.

Symbol scale added to configurations in Connections to Master DWG

When saving configurations in Connections to Master DWG, now also symbol scale is saved in the configuration.

Cable tray presentation in Viewport preferences now affect busbars

In Viewport preferences, presentation settings for Cable trays have been changed to Cable trays and busbars and that presentation setting will affect also to busbars. Busbars weren't shown as 3D objects in Navisworks, now when options have been selected as 3D, they will be shown properly in Navisworks.



1.4 Circuit designer

Create Circuit Schematic function, Automatic creation of layouts

Now after creating circuit schematic from Switchboard schematic, layouts will be done automatically based on the pages in the drawing and default layouts (Layout1, Layout2) will be deleted.

Create Circuit Schematic function, Plot settings

Now it is easier to define plot settings for circuit schematic drawings created from Switchboard schematic. There are two cases where the plot settings are found depending on whether page template is in use or not.

1. Page template is not in use: plot settings will be copied from MagiCSFrame.dwg (found from MagiCAD Support folder) to all layouts.
2. Page template is used (this can be defined in Project): plot settings will be copied from the page template to all layouts.

If plot settings are defined properly in either drawings, new drawing can be plotted without the need to configure anything in the new circuit drawing.

1.5 Room

Calculations in MagiRoom improved

Various internal improvements to the calculations in Room projects to reduce slowness.

1.6 Schematics

Use ESC to accept drawn line in MagiCAD Schematics and Electric

When drawing lines/wires in electrical, circuit designer or schematics and pressing ESC-key, now it no longer cancels what you have drawn but leaves them in the drawing.

2 Resolved issues

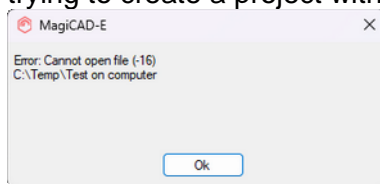
2.1 Common

IFC Export's "Append to existing file"-option didn't work

Appending to an existing IFC file didn't work in the IFC Export. This has now been corrected.

Project Wizard error: "Error: Cannot open file (-16)"

Due to an internal issue "Error: Cannot open file (-16)" was shown at the end when trying to create a project with the Project Wizard.



Cannot run script files in Drawing Cleaning Utility on BricsCAD

It wasn't possible to run script files in the Drawing Cleaning Utility due to what commands were available for calling in BricsCAD itself. Now this can be done.

Wipeout frame issue related to segments

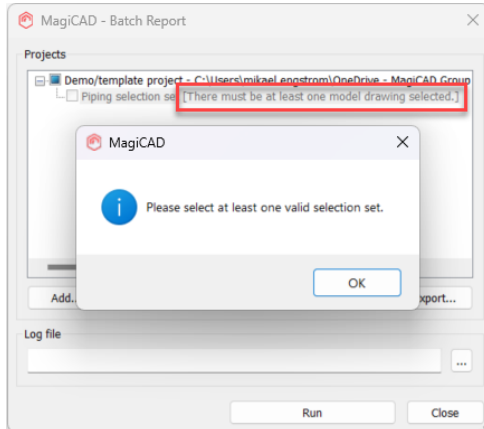
When a dimension text was connected to a segment and a component was placed at that point, breaking the connection, the dimension text's text correctly disappeared, but if a wipeout frame was used then the wipeout was stuck left in the drawing without the dimension text remaining.

Now the wipeout frame is removed correctly together with the dimension text in this case as well.

Invalid information in the Batch Report's message in case there was an issue

Earlier the Batch Report stated that the user had to select a valid IFC Selection Set, instead of one for the Report which was the function in question, and not the IFC Export.

This text in the warning has now been corrected and there is also additional information as to why the selection set might not be valid:



"Print all" translation issue in Reports

"Print all" didn't correctly translate all texts in non-English versions of the report.

2.2 Ventilaion and Piping

Common

Active storey changes after running calculation (continuation from 2025 UR-1.1)

In MagiCAD for BricsCAD the active storey changed in some cases, for example not being able to draw using MagiCAD functions in the active drawing.

This issue still remained after the initial corrections in 2025 UR-1.1 and new corrections have now been made to solve the issue.

Dimension text installation slow and search circle invisible

The MagiCAD search-circle was not visible in some cases in MagiCAD for BricsCAD. This issue has now been corrected.

Color issues fixed in Move Z

Corrected the missing colors in the preview.

Calculation corrections

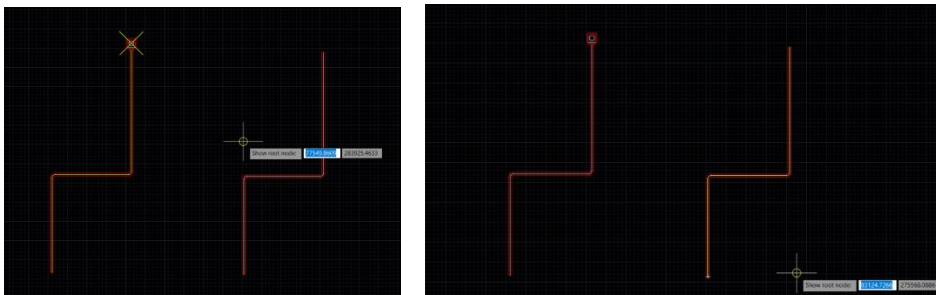
Issues fixed in an earlier version of MagiCAD (2024 UR-1), but documented here together with the testing. There were issues related to the following topics, and have been corrected:

1. If continuous flow was used in water points fed by mixing valve, continuous flow was added two times to mixing valve.
2. Dp of fire hydrants was not shown in the calculation report.
3. Dp of pipes next to fire hydrants was not calculated and didn't show up in the calculation report.
4. Simultaneity wasn't used in when the Danish calculation standard was used in the project.

No message and marking about "Index Run" when the device was a None-node

The None-node wasn't marked and no message was shown for it when running the calculations and asking for the index run to be shown.

Device vs node:



Now this will be shown for the None-node, like for any device.

Delimiter decimals suppress didn't work

The "DIMSEP" value didn't work for commas (,) in the project, which led to MagiCAD not correctly removing trailing zeroes in dimension texts.

Now this has been updated so that it works correctly for commas as well, and the trailing zeroes are shown as set for the various dimensions texts in the project.

Text of Revision Arrow didn't rotate according to view

The revision arrow's text direction was set incorrectly and didn't follow the UCS.

Find & Replace components problem

Streamlined the old and new Find & Replace functions to use the same algorithm when changing the size of components:

1. It is possible to change to a size which is too large, but the program will give a warning about it.
2. And Part Properties will be more restricted than Find & Replace and not change the size if it doesn't fit, and will reset to the previous size.

Properties issue via Xref in another drawing

Properties which are read via the project, like Status and System, weren't showing in the dimension texts when the drawing was as an Xref in another drawing.

This issue has now been corrected and the values are read from the project and shown in the dimension texts.

The locked size was not correctly inherited over the branch for the circulation water

When the pipe size was locked to be of a bigger size what is needed according to sizing methods, the locked size is not inherited as a minimum size over the branch for the circulation water.

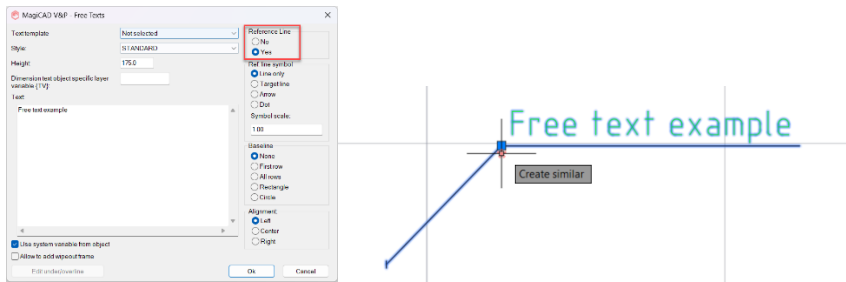
Now this has been corrected and the locked size is not incorrectly downsized anymore.

Duty point issues in the classical dialog

When using the classical dialogs the duty point was in the wrong position in the diagram of some devices.

Create similar from Free text didn't work properly

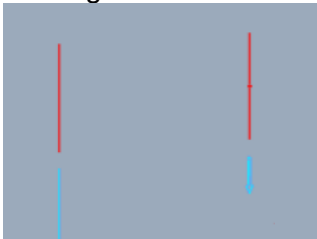
Create similar for Free text didn't work when the free text had a reference line.



Piping

Presentation of Radiators as a thin line

Radiators were shown as thin lines in 1D, even if these should be represented as 2D rectangles. This was due to some internal data missing in some products.



Now the internal value will always be set to a values so that the shape is shown correctly.

MagiCAD calculated pipe sizes wrongly in certain cases

In some cases bigger pipe sizes were selected than was necessary according to the sizing rules and criteria. This affected the newer calculation engine, while the old one which can be run using the MAGISIZCLS-command worked correctly.

With the latest updates the newer sizing-command will also handle these cases correctly.

Issue with Auto-Routing Underfloor Heating

The following error was shown in the message field and no viable options were listed for the layout of the piping:



This was due to the internal engine not being correctly updated when MagiCAD was updated. This has now been fixed so that the internal engine is always updated when MagiCAD is updated.

2.3 Electrical

Edit feeder for the first time doesn't work correctly

Edit feeder dialogue doesn't show column for schematic symbol and data is not updated to wrong column anymore when editing feeder for the first time.

Fixes when drawing Busbars

T-branches fixed when drawing swapped busbar
Inline feed unit cannot be drawn to bend anymore, needs straight busbar to be drawn
Continuing busbar drawing from middle feed can only be done straight forward
Wrong swap was inherited when drawing from plusgrip or create similar
Plusgrip on busbar's fittings no longer start cable drawing, now busbar drawing is started from those
Plusgrip visibility fixed in top view and swapped busbars
Cable plusgrip removed from supply unit
Cables can only be connected to feed units
Swapped busbars work properly in conflict dialog and when using undo on them
Elbows in supply & circuit are now correctly installed
Inline and middle feed units can be installed on vertical busbars
Circuit symbol works when done in vertical feed unit

Stretch Segment has issues with busbars

When stretching busbar segments, circuit units were moved and bends lost their branch length.

Now circuit units don't move anymore and bend hold their branch lengths.

Small fixes to bus systems report

1. Long device names and warnings no longer go on top of next rows texts
2. When creating the block, guiding text no longer stays in prompt after block is created and dialogue is closed

System classification changes to system code in dimtexts

System code and System classification were using same ID and system classification were shown as system code.

Now System code and System classification show their own value in dimension texts.

Connection box with back box doesn't always work properly

If you started to draw cable from the middle of an existing cable and added a connection box in that place, which have back box defined, the back box was not added to the connection box. Now back box is added correctly.

Cable connection to Lighting track & LED-stripes disappears when using boX

When drawing cable from lighting track or from LED stripe and then using boX function to add connection box, the connection box didn't appear to the end of the cable but to the last bend.

Now connection box comes to the end of the cable.

Set Properties not removing trailing zeros from nominal current

When changing nominal current of protective device using Set properties in Switchboard schematic, trailing zeroes were not removed.

Now trailing zeroes are removed correctly.

Report function optimised

When making a report with cable tray bends selected to the report template, the report took a long time to complete.

Now report works fast regardless what properties have been selected into the report template.

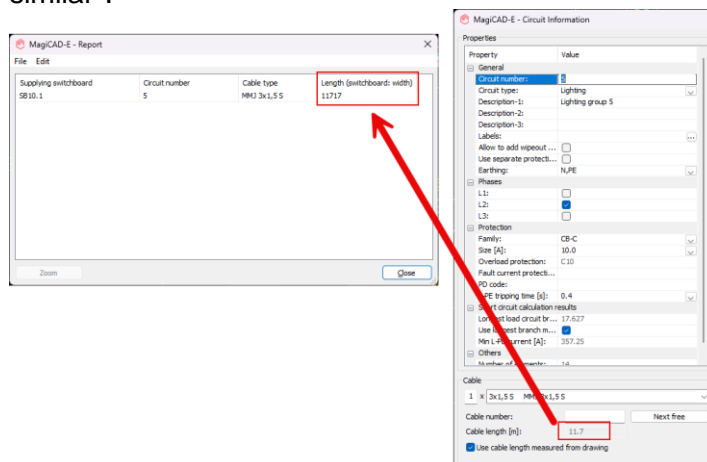
Cable length calculated wrong when connection nodes exist in the supply cable

When doing short circuit or voltage drop calculations, supply cable length were incorrectly calculated when there was a connection node in the supply cable.

Now cable lengths are calculated correctly

Length not showing the cable length of circuit symbols in reports

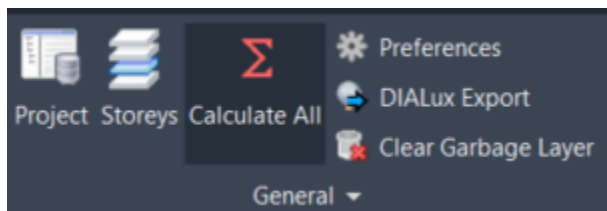
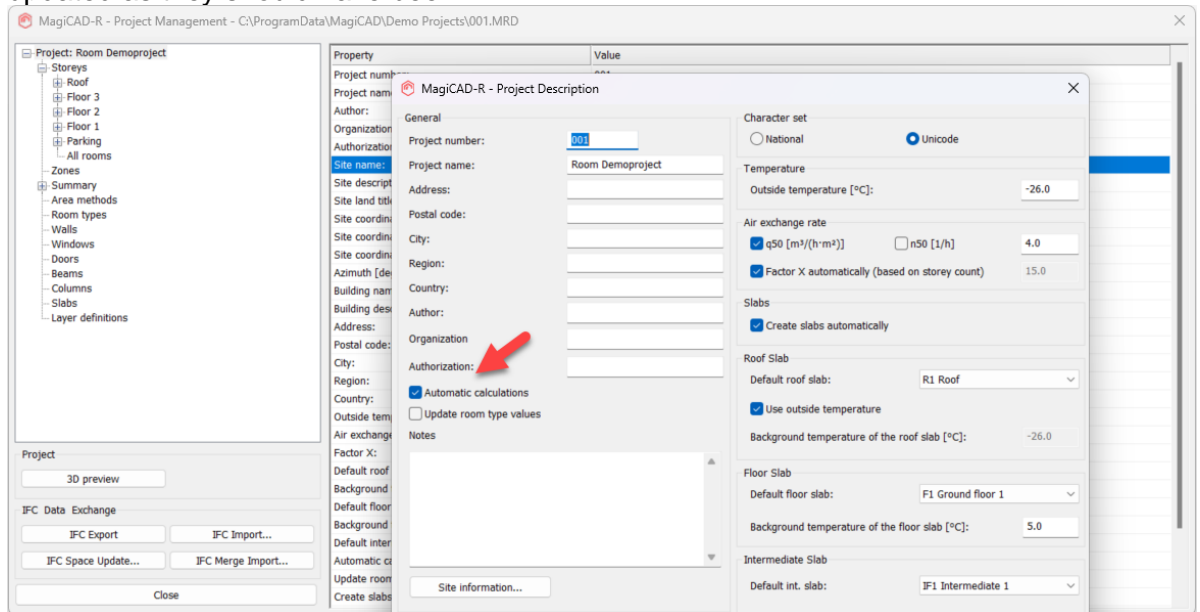
Cable length from circuit symbols were not shown in reports. Now cable length from circuit symbol is shown in property "Length (switchboard: width)" and from multiple circuit symbols, their length will be summarised in the property "Total length of similar".



2.4 Room

"Calculate All" didn't work in MagiCAD Room

When having the automatic calculations set OFF in the MagiCAD Room Project Description, and then selecting to "Calculate All", the heat loss calculations weren't updated as they should have been.



2.5 Schematics

PDF Export in Schematics crashed BricsCAD

The PDF Export in Schematics caused a crash in MagiCAD for BricsCAD.