News

CADKON+ 2024

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CADKON+ 2024 News

The main new feature of CADKON+ 2024 is the **scaling of notes**. This new general functionality allows texts, annotations, hatches, Multileaders (all notes) to adapt to the current scale. That means that when changing the scale of notes, their size for a given scale can automatically change, their position can change, or some notes can be hidden for the current scale. We have added a number of small features and functionality to speed up work with drawings. For example, a new Add Selected command, you can **isolate objects** independently of layers, it is easier to copy layouts, and you can now control the layout via the status bar. You no longer have to manually check if your version is up-to-date, the new version 2024 can **automatically search** for available program updates and offer them to you for download.

Structural designers using CADKON+ Architecture will be pleased to see a number of enhancements related to working with bubbles. In particular, **bubbles have been redesigned to a more modern entity type called Multileader**, which significantly improves the handling of the bubble and its leader. Another new feature is the ability to add/remove leaders in one click in connection to the number of pieces in the report. They will also appreciate the possibility **to report bubbles in tables by floor**, which, if not up to date, are automatically crossed out and updating them is now a matter of one click. This eliminates the need to generate new tables every time they are not up to date. Another very interesting new feature is **the work with construction states**. You can very quickly choose whether you are drawing the original state/ demolished structures/ new state not only for new structures, but also retroactively for already drawn structures. Interesting new features are also the flat and zone legends or the possibility to work with elevation mark templates.

CADKON+ RC has been enhanced in several areas to improve productivity and output quality. One improvement is **the bar Spacing** feature, which now allows faster and easier adjustment of bar spacing in the most frequent cases, saving time and effort. Other improvements include a new **Item Manager** option that makes it easier to find items on the drawing and to manage the project, **accurate display of bars in the 3D model**, allowing better control and presentation of bar reinforcement, rounding of the total bar length when measuring on-axis, which ensures better results in practice, improved U-shaped bar bending detail, which increases drawing legibility when working with this type of bar, and the ability to save **elevation mark** settings into templates, which simplifies work and maintains consistency in drawing appearance for different customers.

This document serves as a detailed overview of new features, improvements and lists fixes CADKON+ 2024 of CADKON+ 2023.

Content:

News for CADKON+ ARCHITECTURE, CADKON+ RC and CADKON+ BASIC
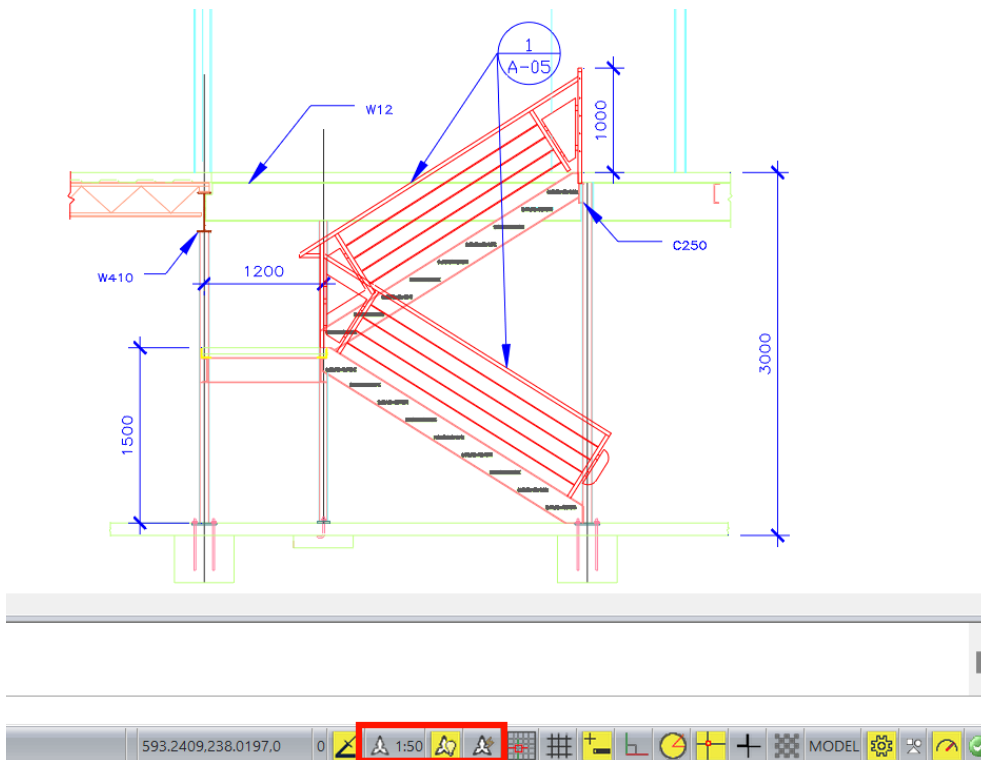
Annotations scale

Now all annotations can be automatically adjusted to the set scale. That is, if you change the scale in a viewport, for example, the scale of the annotations will automatically change relative to the set scale, and also their position may change or their display may be suppressed for certain scales.
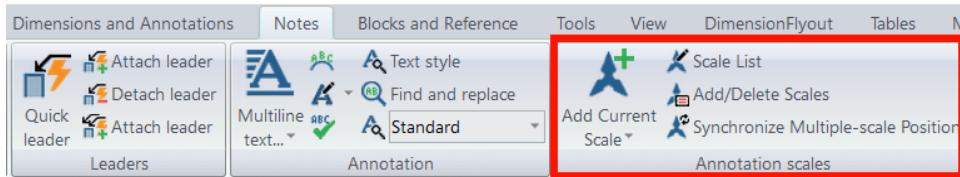
Pict. New tools for working with annotation scales.

The following object types can respond to annotation scales:

- Texts (Mtext, Dtext) - option to set Annotations directly in the text style.
- Dimensions - option to set Annotations directly in the dimensions style.
- Multileaders - option to set Annotations directly in the Multileader style.
- Line types - controlled by the "MSLTSCALE" variable.
- Blocks - option to set Annotations when creating a block.
- Hatches - Annotation setting is available in the Hatch dialog.



Pict. New controls for setting the annotation scale.

Note: Annotation scale is a general functionality available across CADKON+ modules. Full integration of annotation scaling within the MEP and Architecture professional features is planned for future releases.

Add selected

A brand new command in the right-click context menu that lets you draw the exact same object you selected earlier into your drawing. For example, you need to draw a part to an object and you don't know what layer the object is in, what color it is set to, what line type it is, etc. So you simply select it and choose Add Selected and it will create the exact same copy with all the same properties with the same settings.

Isolating entities

You will now find a new setting for the ability to isolate entities independently of layers on the status bar. This allows you to easily hide parts of the drawing without having to detect the layers they are in and turning them off. With a few clicks, you can isolate even a single entity from a drawing and work with it at your convenience.
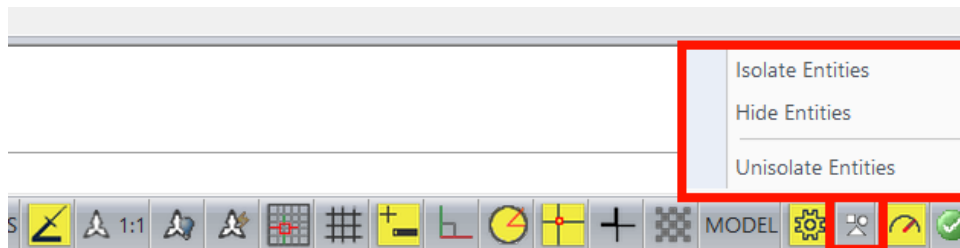
Pict. New tool for isolating entities independently on layers.

Plotting and layout

We have simplified the control of viewports. You can now change the scale of the selected viewport or lock the viewport content via the status bar. The viewport can be copied simply by dragging and dropping with the CTRL key held down; the layout name is copied directly when the copy is made.

*Pict. New tools to control viewport scale and lock viewport.*

Preview has been implemented for our internal DWG to PDF and AdvanceCAD PDF printers. The preview for these internal printers can therefore be used as for other third party printers.

eTransmit

This older command has been improved with several new settings. You can now set the following properties:

- It is possible to set the DWG format to which the transmittal package drawings are converted.
- The transmittal package name can be preset.
- When a transmittal package is created, information about the set printer may be deleted.
- The function can also now automatically bind all external references.

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- The transmittal package can be secured with a password.
- The function can also automatically purge all attached DWGs.
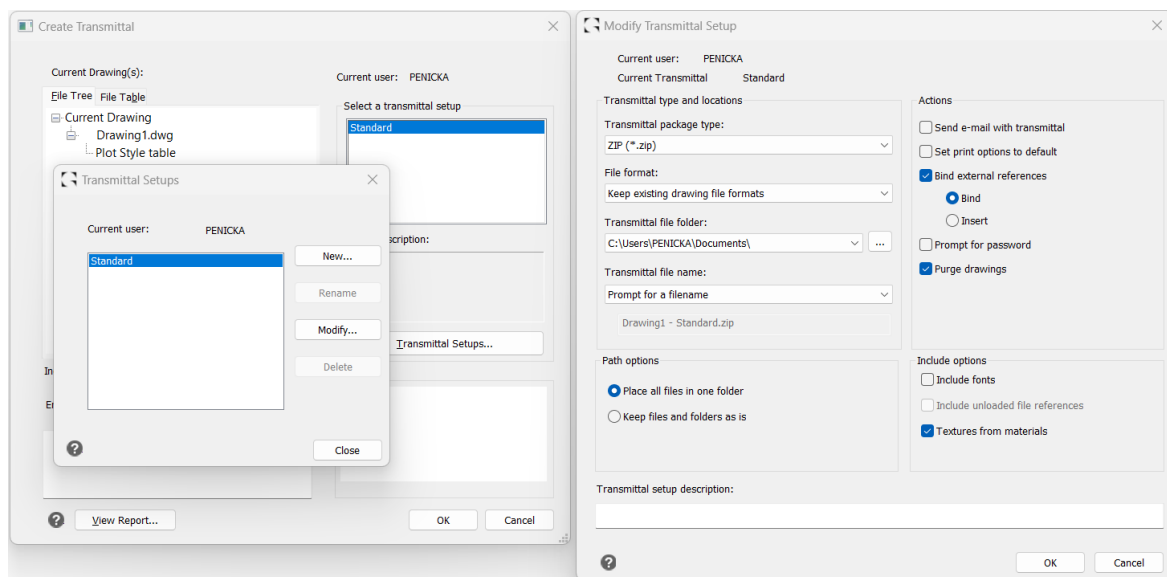
Pict. Enhanced options of eTransmit.

3D

At the request of a number of users, the following new modeling commands have been implemented:

- Templating ("_LOFT" command) - creates a 3D solid from several selected cross-sections.
- Dragging ("_SWEEP" command) - creates a 3D solid by dragging along the selected trajectory.
- Polysolid ("_POLYSOLID" command) - creates a 3D solid in the shape of a wall with the specified width, height and alignment.
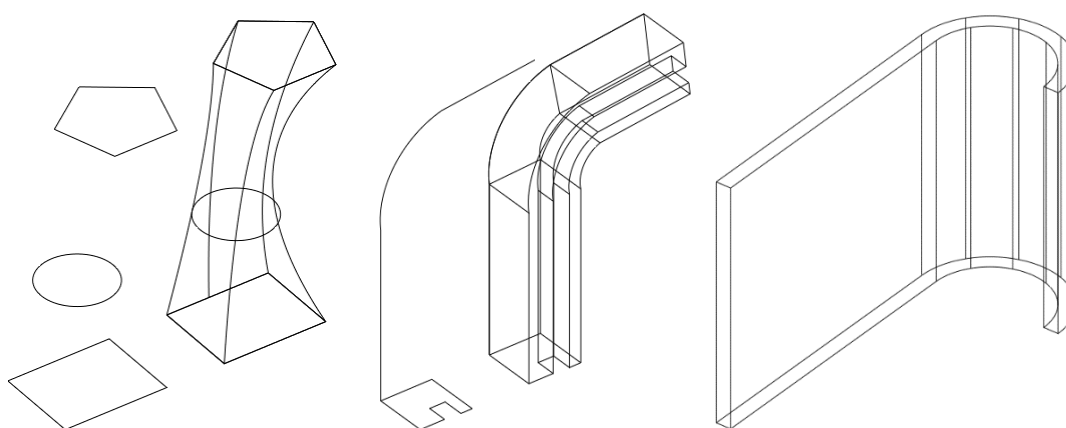
Pict. An example of templating, trajectory dragging and polysolids.

Working environment

All icons have a new design, which has started with the release of version 2023. All icons, menus, etc. have already been transformed to this new design.
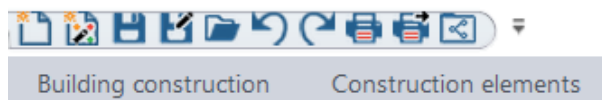
Pict. New icon design implemented to the Quick Access panel.

Frequently used commands have been added to the Quick Access panel, plus a number of panels have been supplemented with existing commands and functions that previously had no icons and were not included anywhere.

Due to the implementation of additional tools in the status bar, the control descriptions have been disabled and now only the icons of the respective controls appear in the status bar. This setting can be changed in the context menu of the right mouse button.

Automatic updates

The program can now check for the availability of released updates at startup and, if necessary, offer the option to download the suggested updates, including the news.
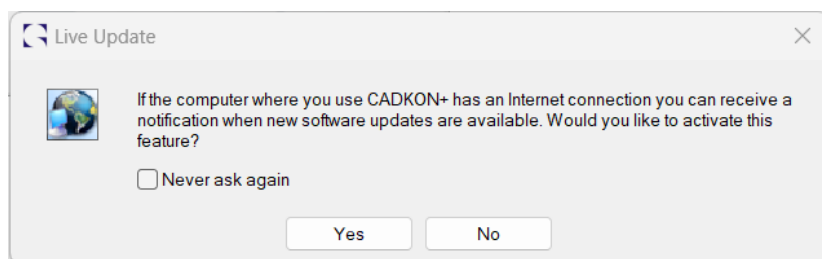
Pict. Automatic program updates setting at startup.

Other

- The OTRACK auxiliary target placement speed has been increased from 400ms to 150ms ("ETRACKDELAY" variable).
- When navigating between drawings, the program now always retains the POLAR setting when moving to another drawing.
- Loading external references is no longer affected by the set path within the variable.
- "XREFSAVEPATH". The older way of searching for Xrefs could cause Xref mismatch if there were Xrefs with the same names.
- The format of dynamic table cells (number, text, percentages, etc.) can now be changed for multiple selected fields at once.

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CADKON+ ARCHITECTURE News

Bubbles as Multileaders

Bubbles, one of the most popular features of CADKON+ Architecture, have been redesigned into a more modern object type called Multileaders based on numerous user requests. This makes it much more comfortable for users to work with the bubble itself and the leader bound to it. The option to add or remove leaders with a relation to the number of pieces significantly improves the possibilities that bubbles provide.
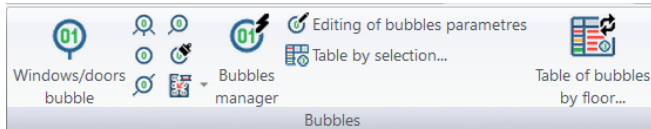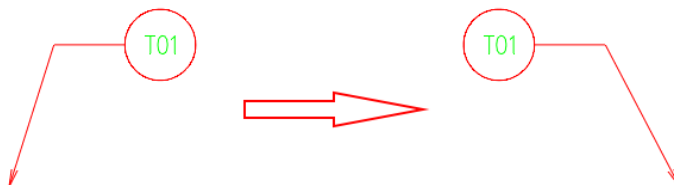

- Bubbles were redesigned into a more modern entity type called Multileaders.
- Bubbles are bound to the leader and allow a simple extension of the leader using a node.
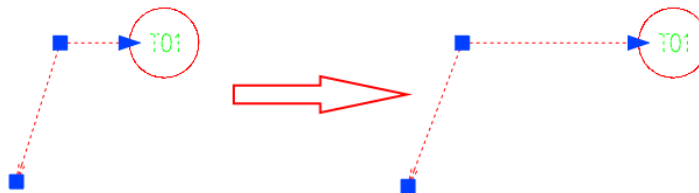
Pict. Extending a leader by moving a node.

- When the leader is moved to the other side, its starting point is automatically changed.

Pict. Automatic moving of the start of the leader when moving the end of the leader.

- Bubbles as multileaders allow you to quickly add or remove a link with a single click in relation to the number of elements being reported.
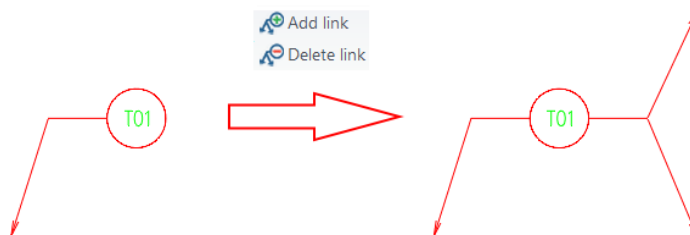

Pict. Possibility of adding or removing a link with a single click.

![GRAITEC logo]

Linked bubble tables

CADKON+ Architecture has for many years allowed you to report building elements in a drawing into a table. It now allows you to report a more modern type of table, the so-called linked bubble table, which is linked to the drawing and automatically crossed out if it is out of date. This way, the user can always see if the table in the drawing is up-to-date. Updating the linked table is done with one click. This eliminates the need to generate new tables every time changes are made to the drawing.
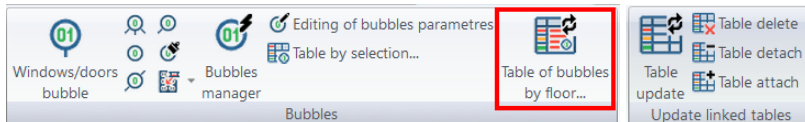

- The bubble table by floor allows you to set from which floors are the items reported
- Option to report from one floor or multiple floors or all floors at once.
- Floor information is set directly on the bubbles.
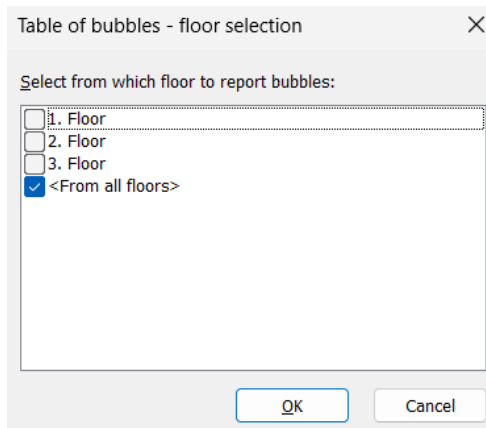
Pict. Option to select the floors from which items are to be reported.

- The table layout and parameter settings have been retained, including the option to use existing templates.
- Possibility of evaluation into a standard table into a drawing or into a dynamic table into a drawing.
- In case of changes in parameters or number of pieces, the table will be automatically crossed out to indicate that it is outdated.

Pict. Outdated table will be automatically crossed out.

- Table update can be done by one click on the Update Tables button. This eliminates the need to generate new tables every time any changes are made to the drawing.

Bubble that is displayed but not reported

Based on user suggestions for solving the situation when you need to show the bubble in the drawing but not have it in the report, we have prepared an option for you not to include the bubble in the report

- The option not to include the bubble in the report can be set at the bubble parameters.

Pict. Do not include in a report parameter setting.

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● The include in report parameter can also be set in bulk using the bubble manager.
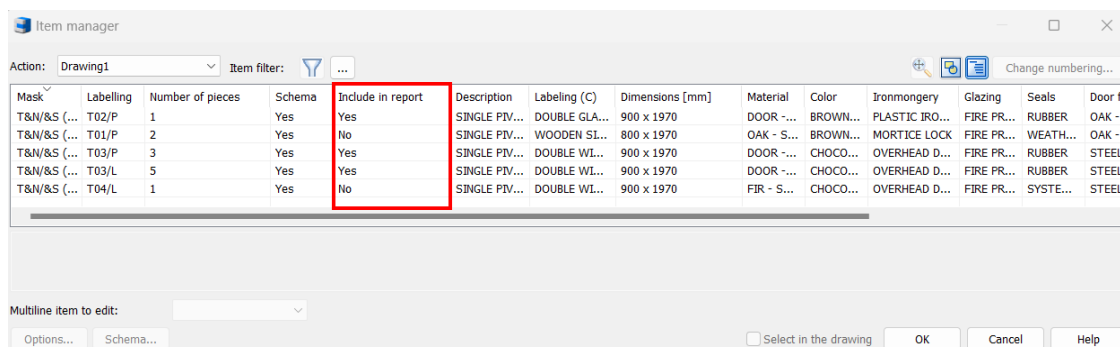
Pict. Bulk setting of the parameter to include in the report in the bubble manager.

● A bubble that is not included in the report is graphically marked in the drawing by being crossed out.

● The crossing out is in the CKNOPRINT layer, which is preset as non-printable. This means that the bubble will be printed without the crossing out but will not be included in the report.

● At the same time, the crossing out informs the user visually that the bubble is not being reported.
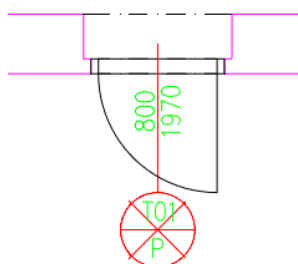
Pict. Graphical indication (crossing out) of a bubble that is not included in the report.

New possibilities of working with structure states - original state/ demolished structures/ new state

CADKON+ Architecture has been drawing structures in layers set in so-called layer keys in the lkm format for many years. Now you can very quickly switch the layer key settings according to your current needs. You can thus quickly determine which layers you are drawing into and with which settings. There are new layer keys for the original state, demolished structures and the new state, but you can create your own keys and simply switch among them to determine which layers the CADKON+ Architecture will render the structures into and which settings will be used. At the same time, you can change the layers or parameter settings of rendered structures retroactively using the new Change Structure State function, not only for structures rendered with CADKON+ Architecture, but also for structures rendered with general CAD.
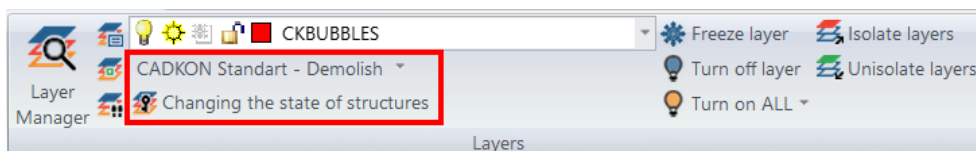
● Possibility to switch the current layer key in the Layers menu or in the Quick Options panel.

● 3 new layer keys were added for drawing the original state / demolition work / new state.

● The Original key has the prefix O_ set before the layer name and the color is set to gray, the Demolition key has the prefix D_ set before the layer name and the color is set to yellow, and the New key has the prefix N_ set before the layer name and the color set to red.
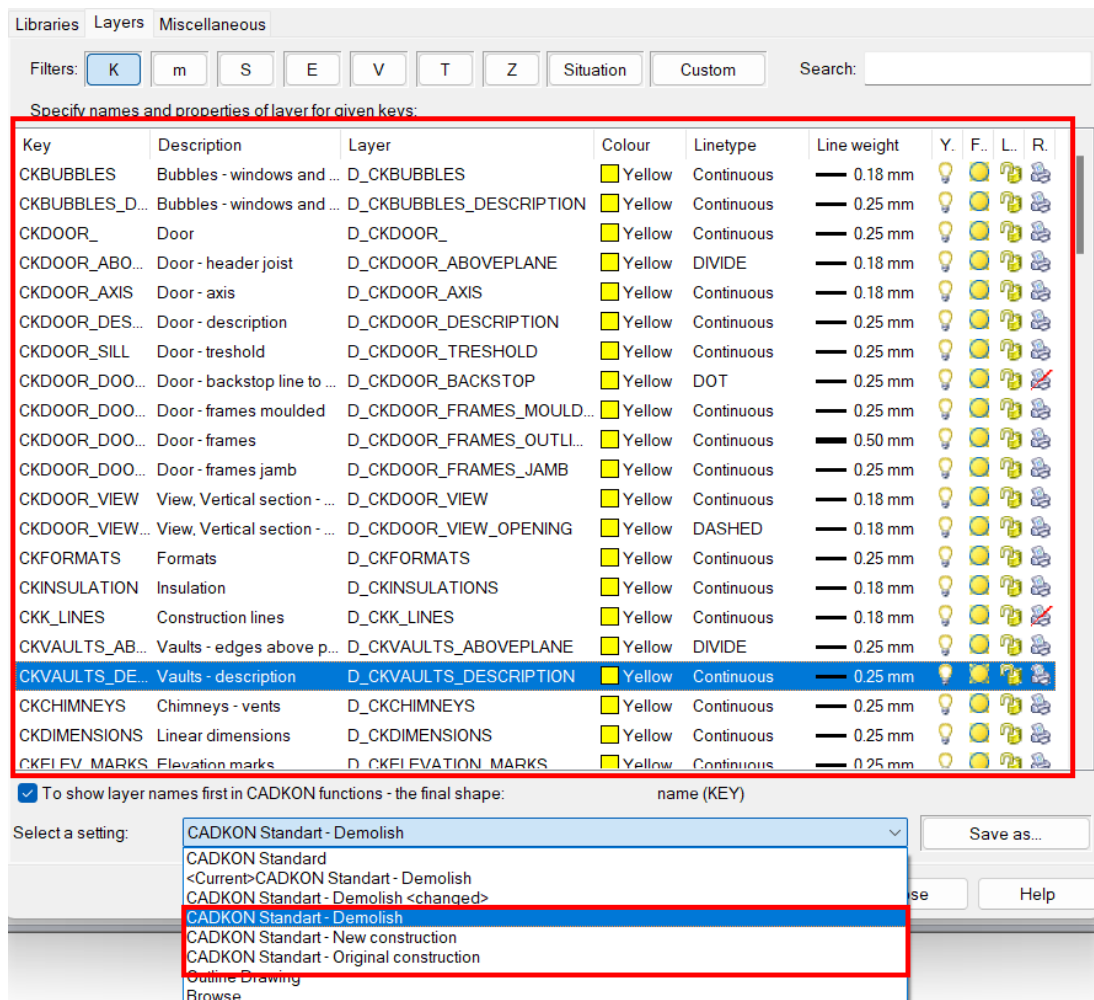
Pict. Three new layer keys (lkm) for drawing the original state / demolition state / new state.

● Possibility to modify preset keys according to user requirements.

● Possibility to create custom keys e.g. for individual construction phases, construction objects, floors, etc.

● Switching the key will keep the already drawn structures in their original state, but newly drawn or edited structures will be drawn according to the currently set layer key.
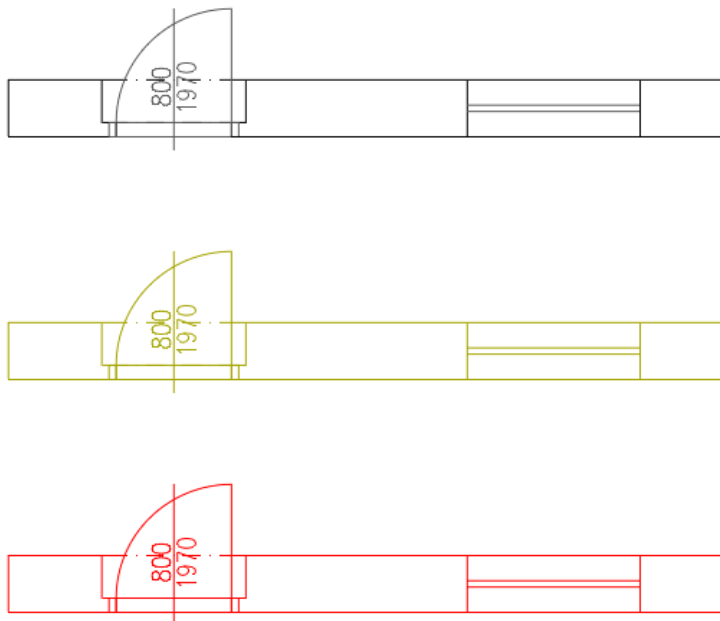
Pict. Example drawing of wall and opening according to the key original state (gray), demolished (red) and new state (original - different layer settings).

The new function Changing the state of structures is used to change the state of already drawn structures.

- The function allows you to work with constructions drawn by CADKON+ Architecture functions, but also with constructions drawn by general CAD functions.
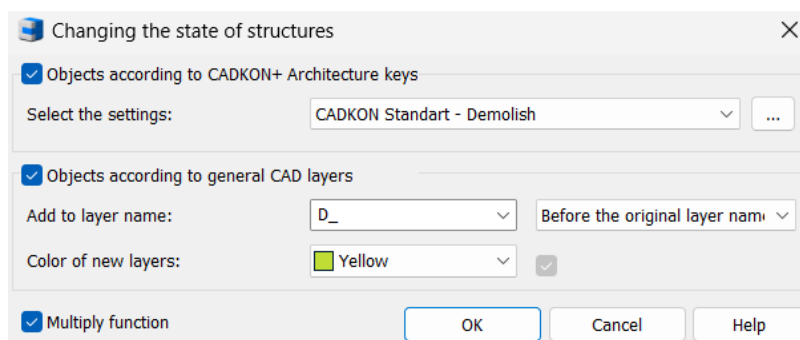
Pict. Dialog for setting the change of the state of already drawn structures

- For structures drawn by CADKON+ Architecture, you can set the key according to which already drawn structures should be redrawn. This changes retroactively according to which key and therefore to which layers and with which settings the structures should be redrawn.
- For structures drawn by conventional CAD tools, it is possible to set the prefix or suffix of the new layer to which the objects are to be redrawn and the new color of the layers. Alternatively, it is possible to keep the original layer name and just change the color of the new structures.
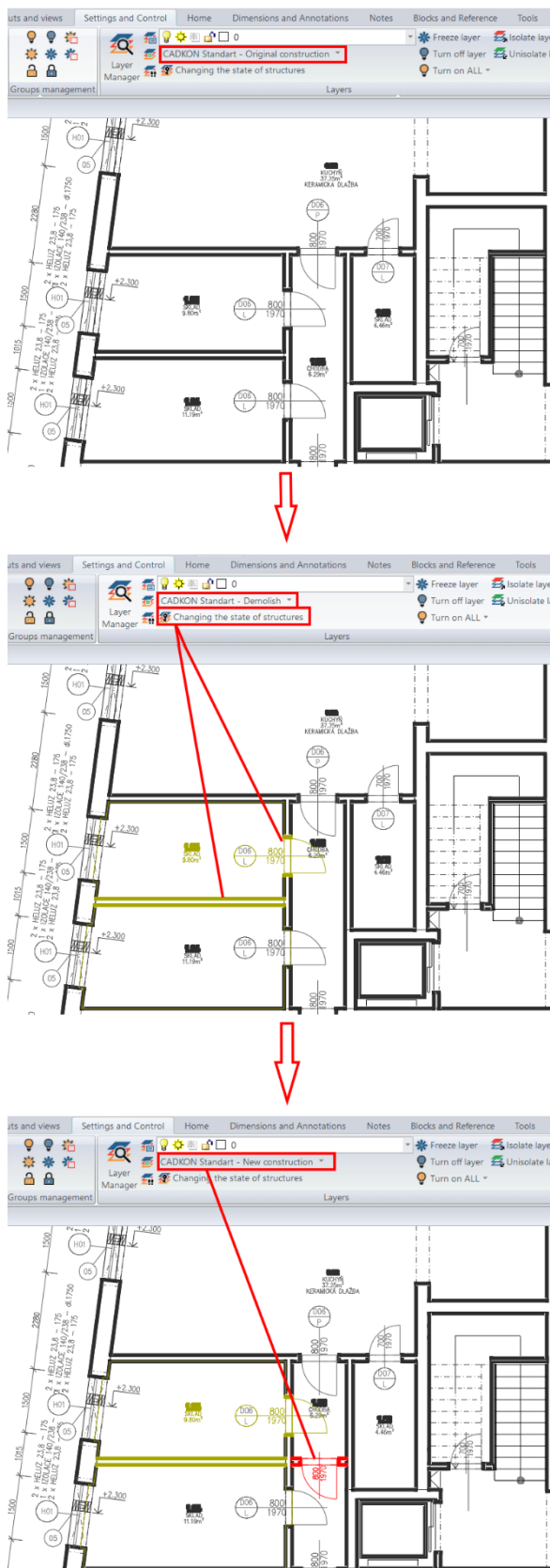
Pict. Example of changing the state of structures (demolished) to already drawn structures (original state) and drawing new structures according to the key new state.

- You can change the state of the structures after setting by selecting the desired objects in the drawing or by selecting a closed boundary.
- Selecting a closed boundary will change the desired objects within the selected boundary, so that the structure is trimmed according to the boundary you select and the objects within the selected boundary are changed according to the chosen setting.
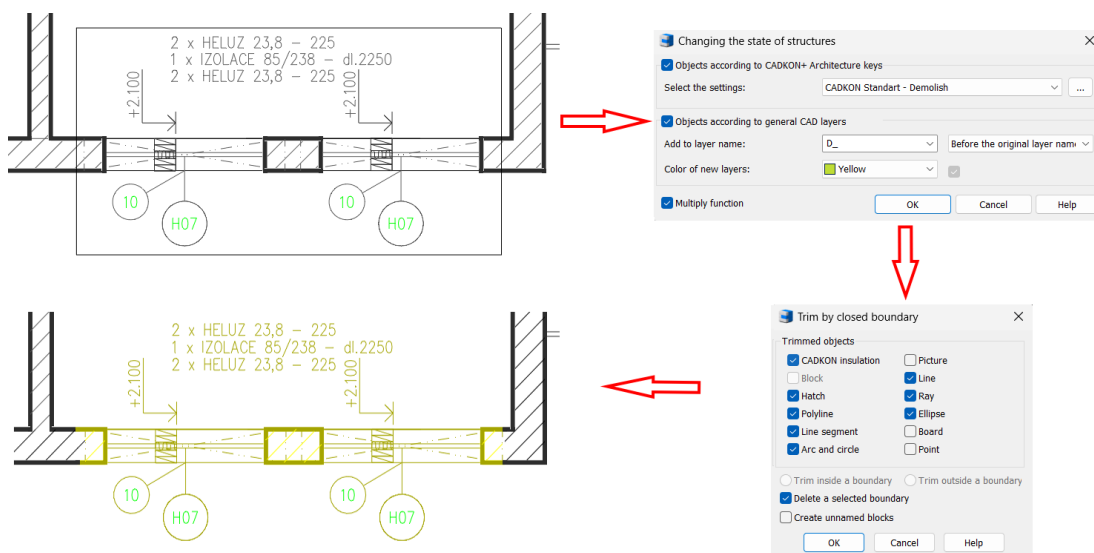
Pict. Example of state change of already drawn structures according to a closed boundary.

Color legends of flats and zones

CADKON+ Architecture allows you to work with flats and zones, including the ability to assign a flat color and a zone color to a room. It is now also possible to create a legend of such marked flats and zones.
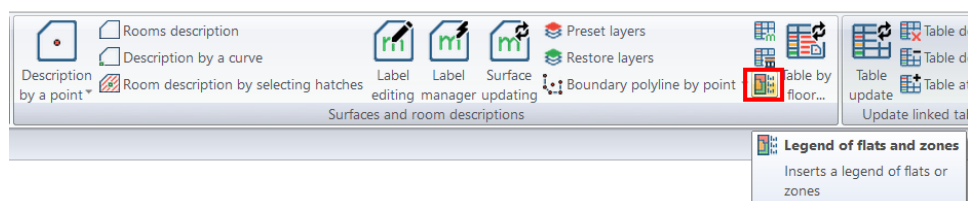
- When creating room descriptions, users can specify the color of a flat or zone to create a color map of flats and zones.
- A legend of flats or a legend of zones can now be created
- Each flat or zone is described in the legend with the corresponding hatch and flat or zone description.
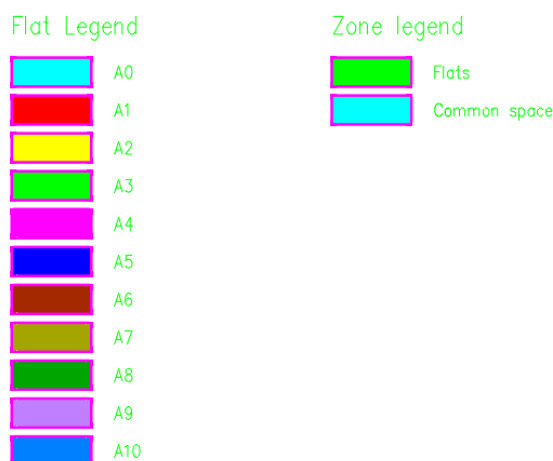
Pict. Automatically generated flat and zone legends.

Elevation mark templates

All settings of elevation mark parameters, including plan elevation marks, can now be saved in the elevation mark template. If necessary, the template can be easily changed, changing up to approx. 20 parameters at a time (e.g. refining the appearance for individual customers).
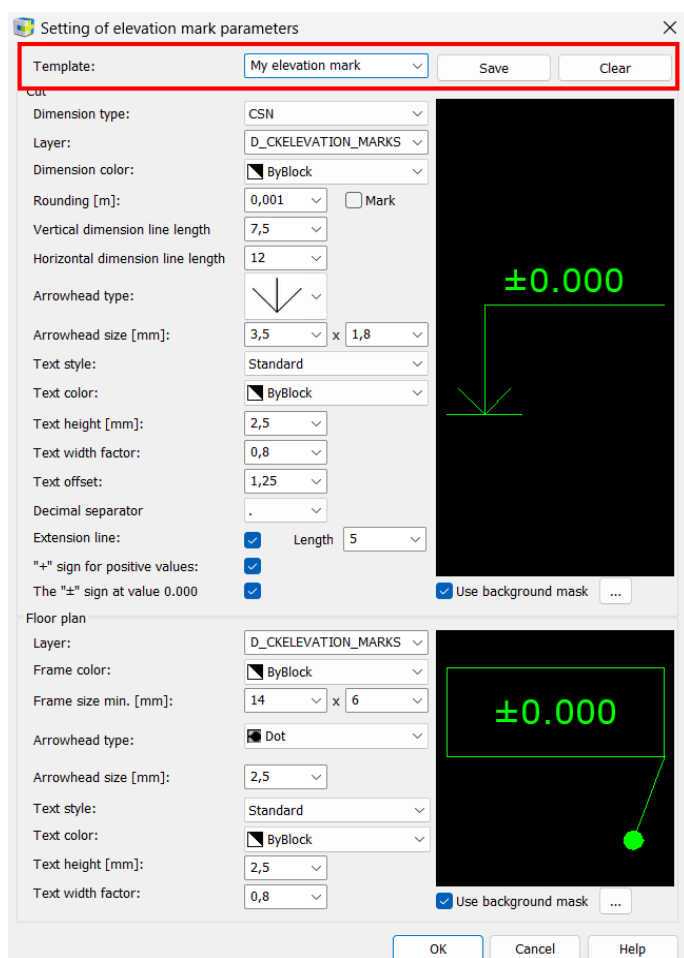
Pict. Saving all elevation mark parameters into a template

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Table templates migration

Based on suggestions from users who customized and created their own table templates, CADKON+ Architecture introduces the ability to migrate table templates from version 2024.

- Option to migrate table templates within the new version.
- Ability to export/import table templates across different PCs.
- Applies to all table templates (rooms, bubbles, lintels, ceilings, etc...).

Expansion and update of the Library of blocks

This year also, as part of the release of the new version, the Library of blocks has been updated and expanded with a number of new blocks. Some manufacturers, e.g. RAVAK, have also been updated according to their current product lines.
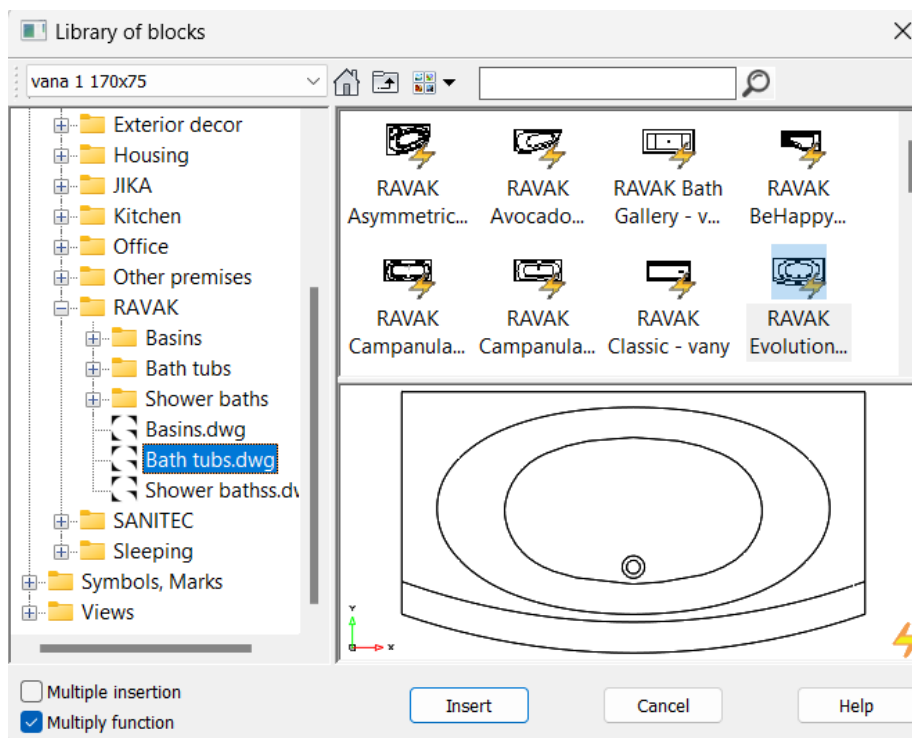
Pict. Library of blocks update, e.g. RAVAK manufacturer.

This time, however, a more general revision has been made, with obsolete blocks removed from various sections and more modern and up-to-date blocks newly added. We have also responded to your requests and new blocks have been added e.g. vehicles, solar panels, computers, mobile phones, coffee tables, armchairs, chairs, cabinets, tables, TVs, lamps.

In total, 700+ new dynamic blocks have been added to the library in almost all sections of the library, in both plan and display views. A number of new sections have been created, such as photovoltaics, technology, safes, desks, etc.... A range of designer furniture has been added, especially from the manufacturer IKEA: designer lamps, armchairs, interior accessories especially in the Housing section. Various types of street lamps, park benches, garden furniture, transport vehicles, etc. have been added in the Outdoor Furniture section.

CADKON+ RC News

Improvements to the Bar Spacing function

The existing bar spacing change function has been redesigned to retain the existing options, but to greatly simplify and speed up the work in the most common uses of this function. This improvement was made based on the suggestions of users who perform reinforcement mainly on monolithic slab and wall structures. These improvements are:

- Option to change the spacing of all the bars in the row without having to select them.
- Option to select multiple rows with different spacing for editing
- Option to select described rows where only some bars are visible and keep the original bar visibility.
- Option to select a row using an oblique bar within the row description.

The above-mentioned new options facilitate the row spacing in already finished drawings - e.g. in a wall drawing, it is possible to select for editing bars in an overlap described by a single annotated dimension.

If one row or part of a bar row with the same spacing or offset is selected, the checkboxes "All bar spacings the same" and "Both offsets the same" are activated, the change of spacing can be done in the field "Spacing".
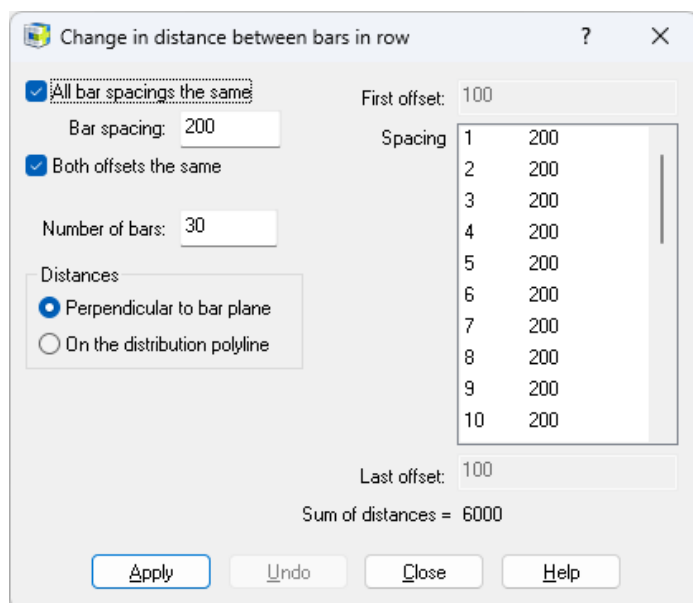
Pict. Dialog when selecting one bar row.

If multiple rows of bars are selected, the entire rows are automatically selected and thus there is no option to select the first and last member of the edited part of the row, the checkboxes "All spacing the same" and "Both offsets equal" are activated and cannot be deactivated. If the bar spacings are different, *various* will be specified instead of the specific value.
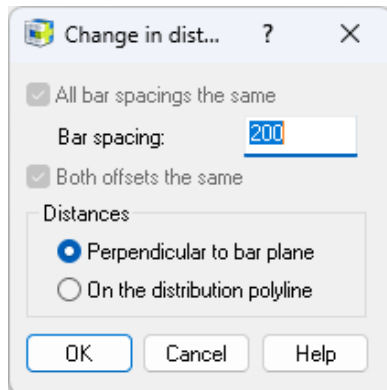
Pict. Dialog when selecting multiple rows of bars.

If multiple rows are selected, the option to edit individual spacing is therefore not available.

Improvements to the Item Manager feature

The reinforcement Item Explorer or Manager displays a list of all bar and mesh items in the drawings. It can be used to, for example, shake off item numbers or otherwise renumber items, remove definitions of uninserted items, change item properties in bulk, e.g. steel type, control the visibility of items in the drawing, etc.

- The Item manager now allows you to mark the area where the selected items are located in the drawing in red using a glyph.
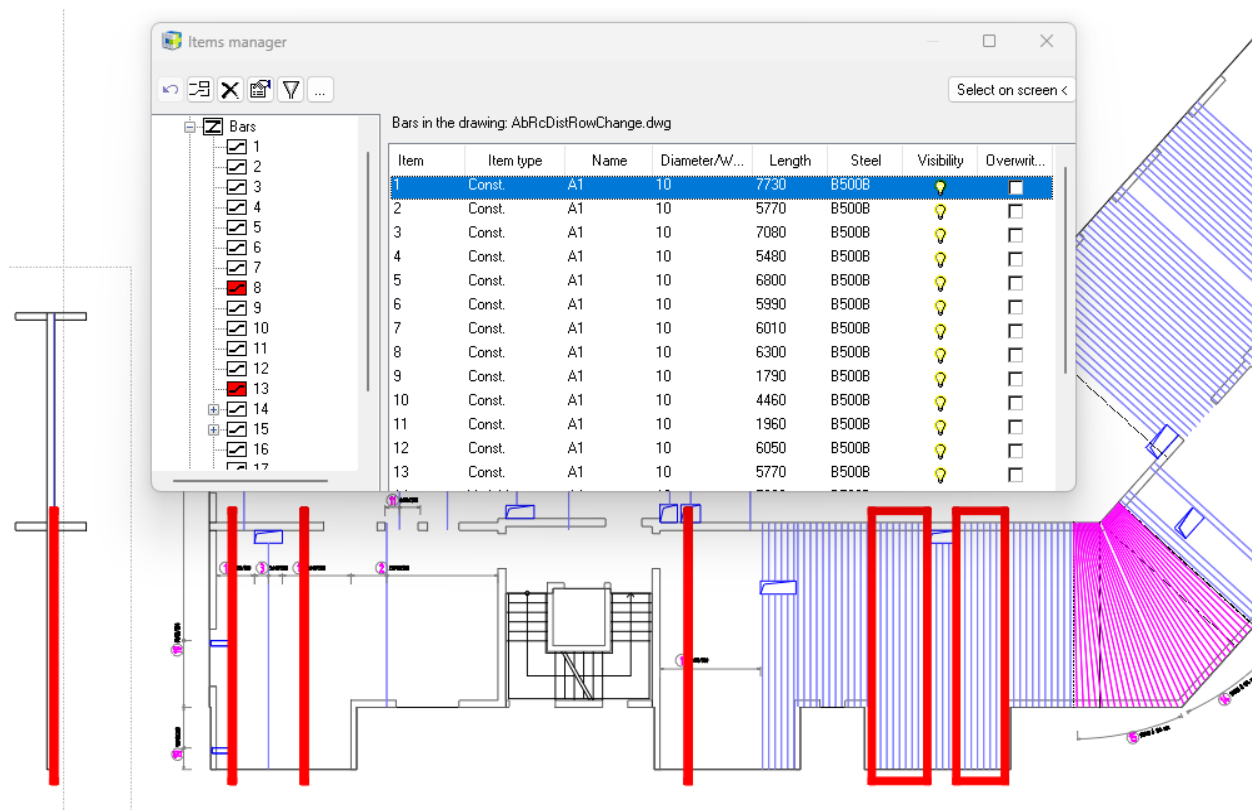
Pict. An item selected in the Item manager is marked in red in the drawing.

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Accurate 3D display of bars including hooks and rounded structures

- The accurate display of the reinforcement in the 3D model is used for better presentation and control of the element reinforcement.
- To activate the accurate display, double-click the green box bordering the 3D element.
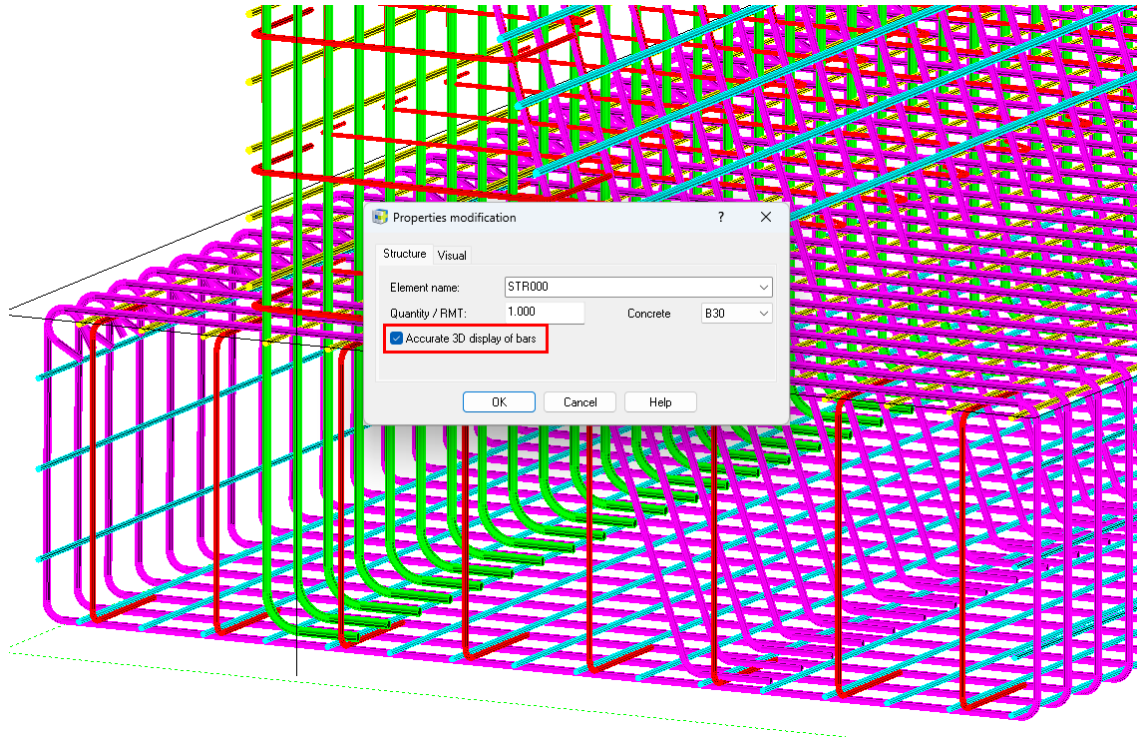
Pict. Option to activate the accurate display can be found in the 3D element properties.

Rounding of the bar total length when measuring exactly on the centerline

- When setting the reporting of the bar total length to the so-called cutting length, the rounding of the bar total length is now applied.
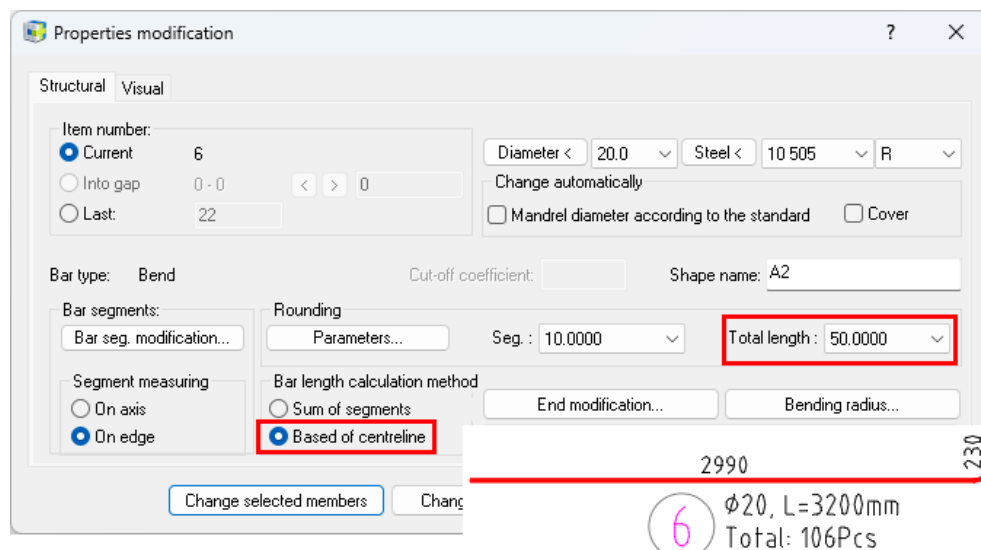
Pict. If the method of calculating the bar total length is set to "Based on centreline", this total length will be numerically rounded according to the rounding value for the total length.

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Improvement of U shaped bar bending detail

● The improvement results in a better positioning of the text that indicates the lengths of the individual bar segments.

Pict. The numbers indicating the lengths of the U-shaped bar sections are automatically placed on the outside of the bar so that they do not overlap and do not need to be moved.

Section outline enhancement

● Section outlines created from 3D solids are now closed curves instead of line segments. This allows these outlines to be used in a function for cutting a hole in reinforcement or for trimming meshes
● The 2D section outlines can now be selected for the EXTEND or TRIM commands.
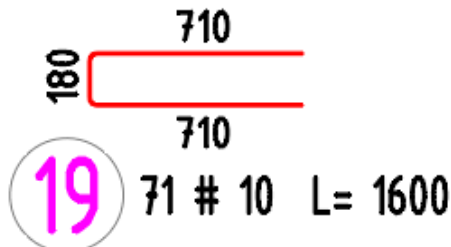
Creating elements from exported Revit elements

● 3D solids created by the Revit add-on "RC Export" contain information about the element name and number of pieces in Xdata. This information is used by the "New Element" tool to define the element created by selecting these objects.

Improved cross-sectional display of meshes

● The display of lengthwise and cross bars of welded meshes in cross-sections is consistent. For example, if a lengthwise bar of the mesh is closer to the surface, this bar is also closer to the surface in all other sections.
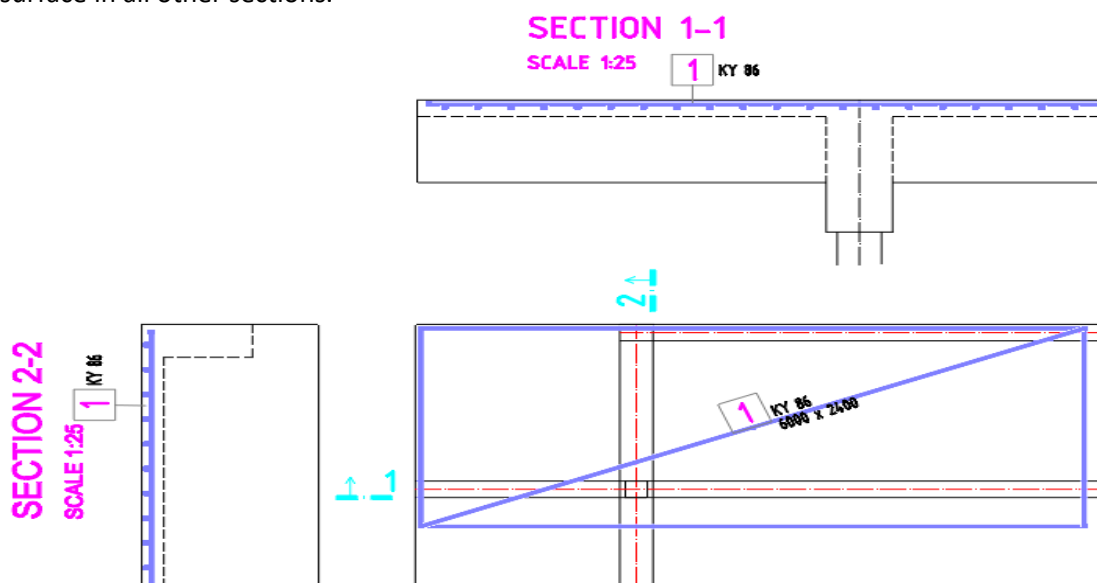
Pict. The display of the lengthwise/cross bars of the mesh relative to the surface is consistent in the cross-sections (Sections 1-1 and 2-2).

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Elevation mark enhancement

- All elevation mark settings - about 20 parameters - including plan elevations, can now be saved in the elevation template.
- Whenever you need, you can simply change the template.
- It is possible to switch between saved templates, e.g. for individual customers, and to be consistent with their appearance.
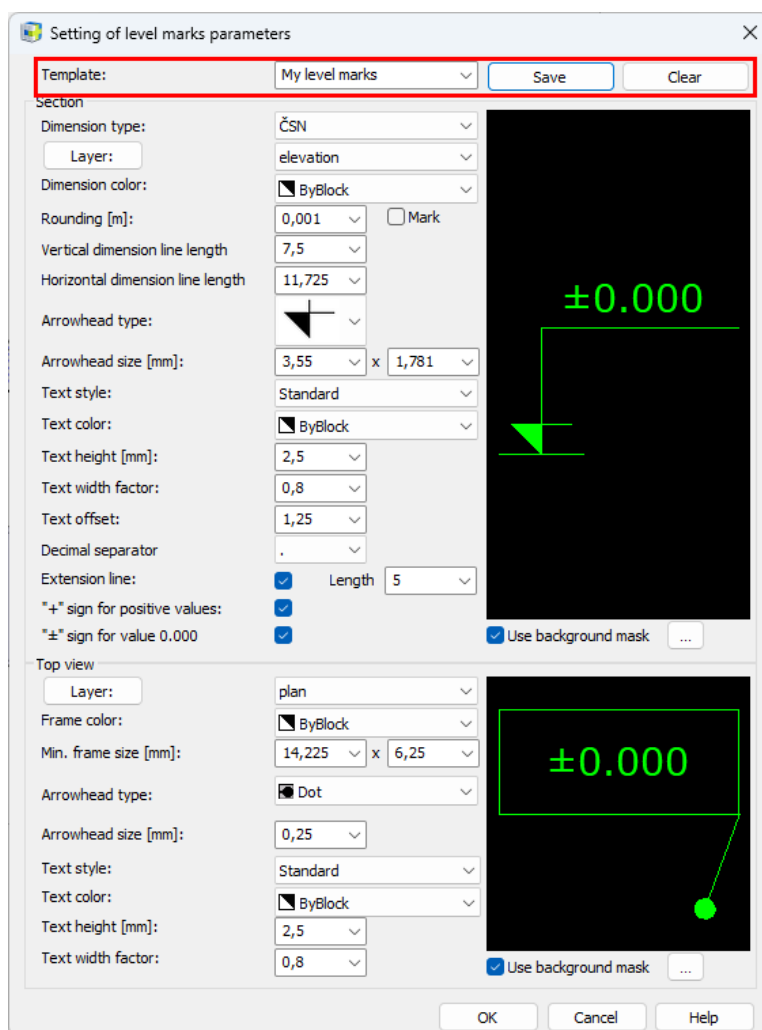
Pict. Saving all elevation parameters to a template.

Improved behavior of the dimension of the bar row description.

- If there is a dimension of the bar row description in the selection of the STRETCH command, (_STRETCH) it is moved in the same way as common dimensions.

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Solved problems common for CADKON+ ARCHITECTURE, CADKON+ RC and CADKON+ BASIC

Drawing and modification

- Program failure when trying to edit a specific spline.
- Changing the scale of a selection and drawing ignores Multileaders.
- Incorrect functioning of property filters on current selection in CZ version.

Rendering and plotting

- Error when creating temporary PDF files in the current folder of the resulting PDF.
- Temporary PDF files are not deleted from Temp after publishing.
- Random creation of a multi-page PDF if the same project was previously published as a single-page PDF.

Other

- Program failure when changing profile from the program start screen.
- Unable to launch standalone library manager, application fails after launching.
- eTransmit incorrectly handles accents in file names.
- Imprint option not working when editing a solid.

Problems solved in CADKON+ ARCHITECTURE

Dimensions

- Floor plan elevations and floor plan elevations with a leader do not store the history of entered values.
- When copying the elevation marks and then applying the elevation setting change to these copied elevation marks, the original elevation marks settings are also changed.

Openings

- Opening editing deletes the blocks contained in the selection when specifying opening editing.
- Opening editing deletes room descriptions if the curves in the CKRDESCRIPTION_AREA layer linked to the room description are selected when selecting objects in the opening editing entry.
- An error dialog is displayed when an opening is entered with a 0 offset

Bubbles

- Incorrect text in the bubble dialog for the window leader length and door leader length parameters.
- When editing a bubble with a user changed length of the extension line, the default value of the extension line length is always loaded and after selecting OK the length is set according to this default value.

Room descriptions

- Room description by selecting hatches incorrectly detects the hatch boundary and loads the hatch area in specific cases.

Problems solved in CADKON+ RC

Element shape

- The 2D section exchange does not accept some segments.

Bars

- The bar defined from the S-buckle curve is deformed.
- An Unexpected exception occurs when defining a bar shape from a specific curve.

Editing

- Stretching the bars will create unnecessary new items.
- Moving the cutting plane of a 2D section with the STRETCH (_STRETCH) command will cause a mismatch between what the 2D section shows and the location of the cutting plane.
- Bar rotation will corrupt the drawing in a particular case.
- Deleting a 3D element does not remove the displayed boundaries of the clipping region of 2D sections.

Reinforcing by mesh

- Mesh trimming causes SavedwithErors.
- When the mesh layer is disabled, the square around the mesh item number is disabled.
- The description of the mesh in the section was at level 0.

Drawing

- Missing grips at the description.
- Description leaders are not on the bar.
- Bending details and reports do not respect the specified filter for elements or layers.
- Unable to create a description of a bar row containing only 2 bars.
- Incorrect display of an oblique arc bar in a bar row description.
- Report failure if a drawing contains a bar item with zero length.
- Incorrect display of a specific item in the schematic representation.

Tools

- Failure after creating a lm item and shaking items in a particular case.
- Falling of the "Copy 2D + 3D" function on a specific drawing.

Others

- Wall does not remember the layer settings.
- Hovering the cursor over the Xref containing the 2d section frame exits the _XCLIP, PRINT, etc. commands.
- Numeric input of steel profile length does not work when dynamic input is active.
- Copying a 3D element with a solid via the clipboard will lose the link between the solid element.

Technical support

In case of technical issues with CADKON+ installation or functionality, please contact us via our Helpdesk.

Signing in: http://helpdesk.cadkon.eu/
Registration http://helpdesk.cadkon.eu/Registration/Index
Request a forgotten password: http://helpdesk.cadkon.eu/Account/ForgotPassword

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