

News

CADKON+ 2020



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CADKON+ 2020 News

The new CADKON+ 2020 version is in a way a breakthrough. We have successfully included the highest number ever of new commands and settings based on your requests into this version. One of the main innovations is the possibility to create layer filters. The layers can be filtered by any property, they can be sorted into groups and the filters can be exported from or imported to drawings.

PDF import and conversion of its contents to basic objects, which users can consequently work with, is another new feature. Blocks can be easily converted to XRefs, objects embedded in blocks and XRefs can be copied and attribute values can be entered faster thanks to the changes in attribute editing.

You will also find many new commands for bulk text editing in the 2020 version. You can comfortably change text height or justification, you can enclose texts in e.g. a circle or write arc-aligned text. Transparency printing, switching the Contents Explorer to individual palettes and improved display optimization on 4K screens are just the cherry on the cake.

Building designers can appreciate a large number of enhancements in working with rooms, determining their areas, attaching multiple floor structures, working with apartments and zones which can now be defined by different colours, and much more.

The new version of CADKON+ RC provides designers of reinforced concrete structures with another method of the total bar length calculation (exactly to axis), option to label sub-items of variable length, migrate settings from previous versions and other tools from CADKON RCD.

This document serves as a detailed overview of new features, improvements and lists CADKON+ 2020 fixes of CADKON+ 2019 SP1.

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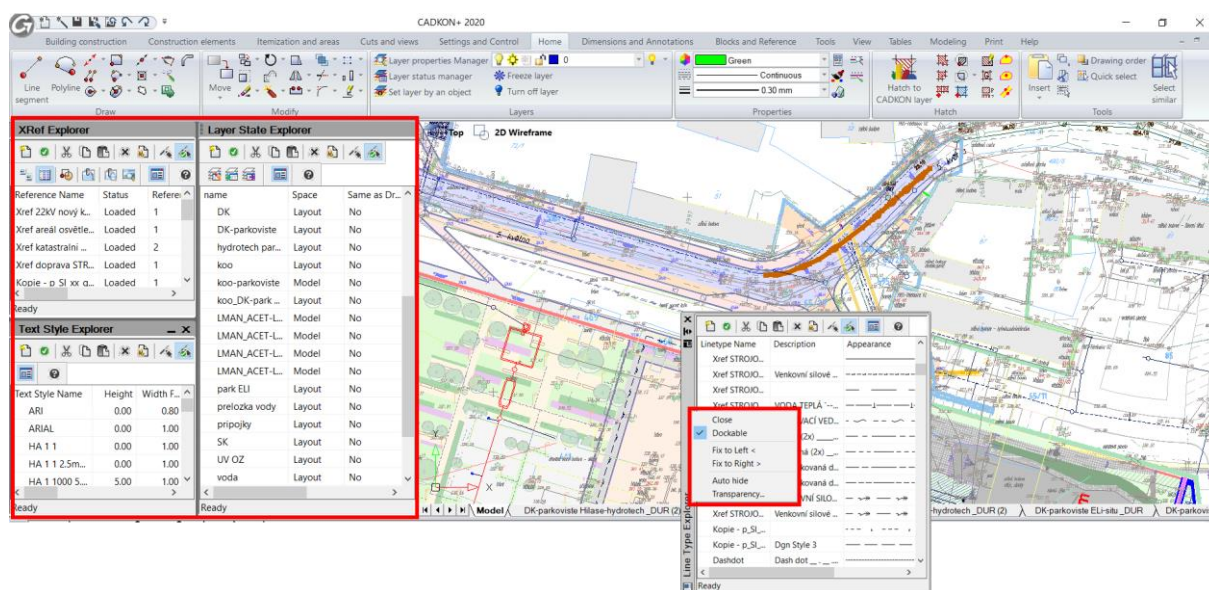
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News for CADKON+ ARCHITECTURE, CADKON+ RC and CADKON+ BASIC

Remodelled Contents Explorer

Option to switch the Contents Explorer to individual palettes

The Contents Explorer (CTRL+2) can now be switched to displaying individual palettes. That enables you to have, for example, the Layer Explorer as an independent palette, XRef Explorer as another standalone palette and Text style Explorer as yet another one. These palettes can be anchored to any side of the drawing area, they can be floating, they can hide automatically, you can set their transparency etc.



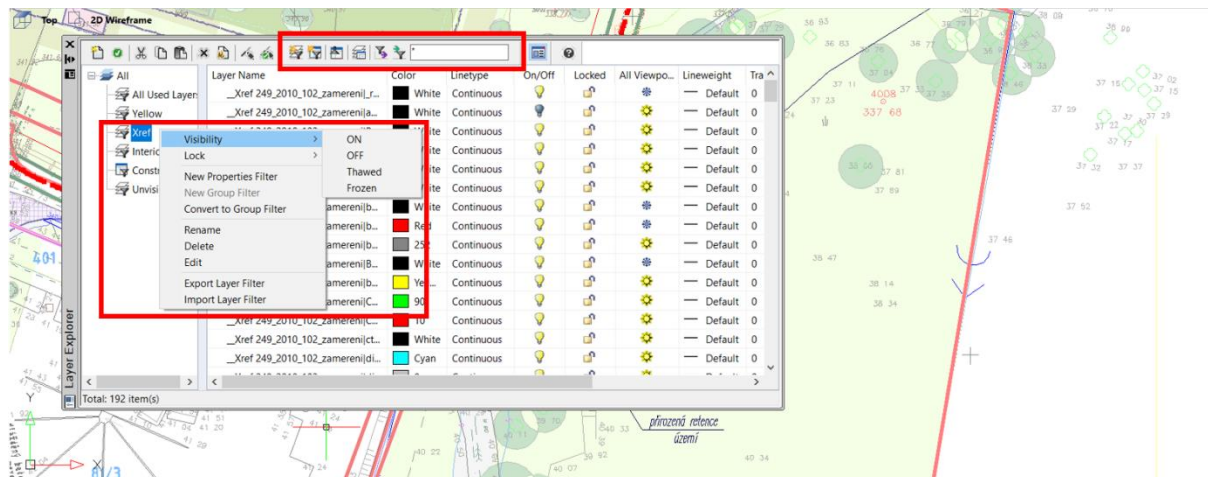
Pict. An example of anchored and floating palettes that can be arranged at will.

A total of 11 new palettes can be displayed:

- Layer Explorer
- Layer State Explorer
- Linetype Explorer
- Text Style Explorer
- Coordinate System Explorer
- View Explorer
- Layout Explorer
- Block Explorer
- Dimension Style Explorer
- Group Explorer
- XRef Explorer

Layer filters and groups

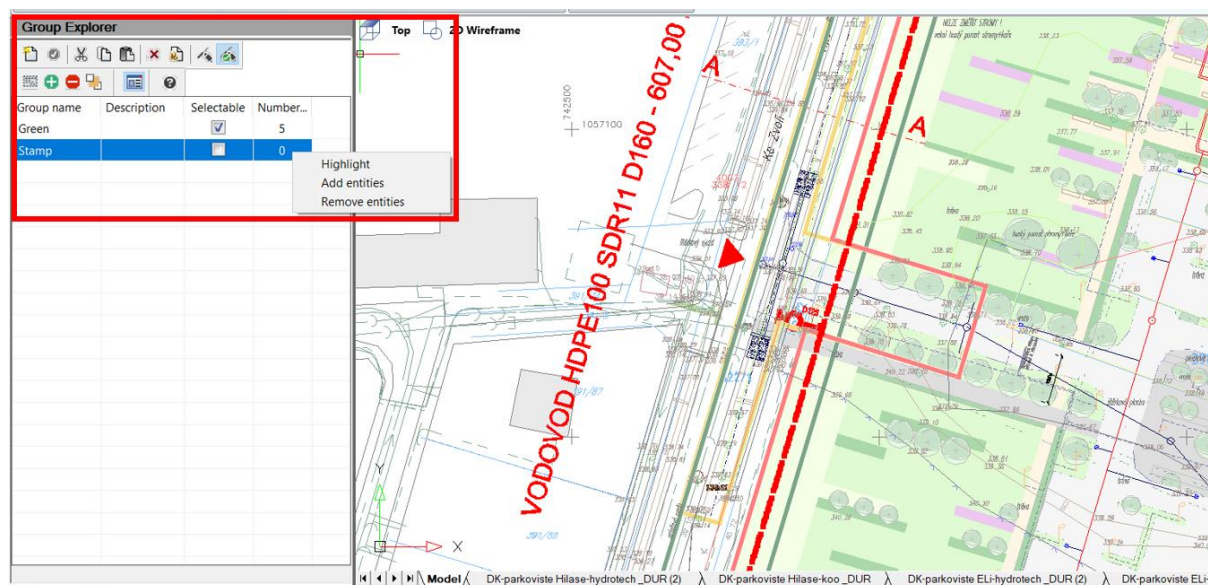
Another brand new functionality is the option to filter layers by any property (name, colour, linetype etc.) or create so called layer groups. Subsequently, these filtered layers can be easily managed together (turn on/off, freeze/thaw, lock/unlock etc.). You can transfer created layer filters between drawings using export and import and you can now also browse the layers using a search box.



Pict. An illustration of the Layer Explorer palette with displayed layer filters and their management.

Group Explorer

You can now also work with groups using the Contents Explorer. It offers a very clear view of the list of groups created in the drawing, you can highlight individual groups in the drawing, edit the group contents and, of course, create new ones, edit existing ones and modify their properties.



Pict. An anchored Group Explorer palette.

Other Contents Explorer improvements

- When creating a new layer, all properties will be taken from currently selected layer.
- All names can be copied using key shortcuts CTRL+C and CTRL+V.

Dialog optimization for 4K screens

In version 2020, we continue to optimize the dialog display on high-resolution screens. Following dialogs that were experiencing some display issues in the previous version were modified in the 2020 version:



- Dialog Options (command „_CONFIG“).
- Contents Explorer (CTRL+2).
- Properties (CTRL+1).
- Dialog Customize (command „_CUSTOMIZE“).
- Dialog Dimension Style Explorer (command „_DIMSTYLE“).
- Dialog to manage XRefs (command „_XREF“).

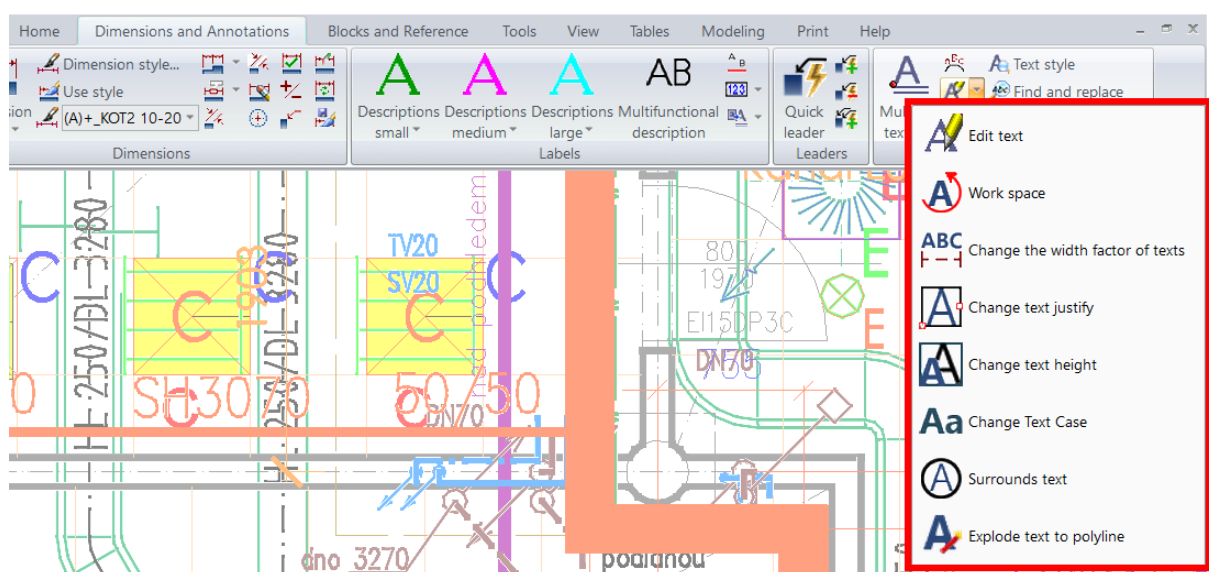
New commands and settings for working with texts

Editing texts

You can find some amazing features for working with texts in this version. For example, it is now possible to easily replace all UPPER and lower case letters, texts can be collectively framed in a circle, rectangle or slot, justified, have their height, rotation or width factor changed.

Individual commands for working with texts are:

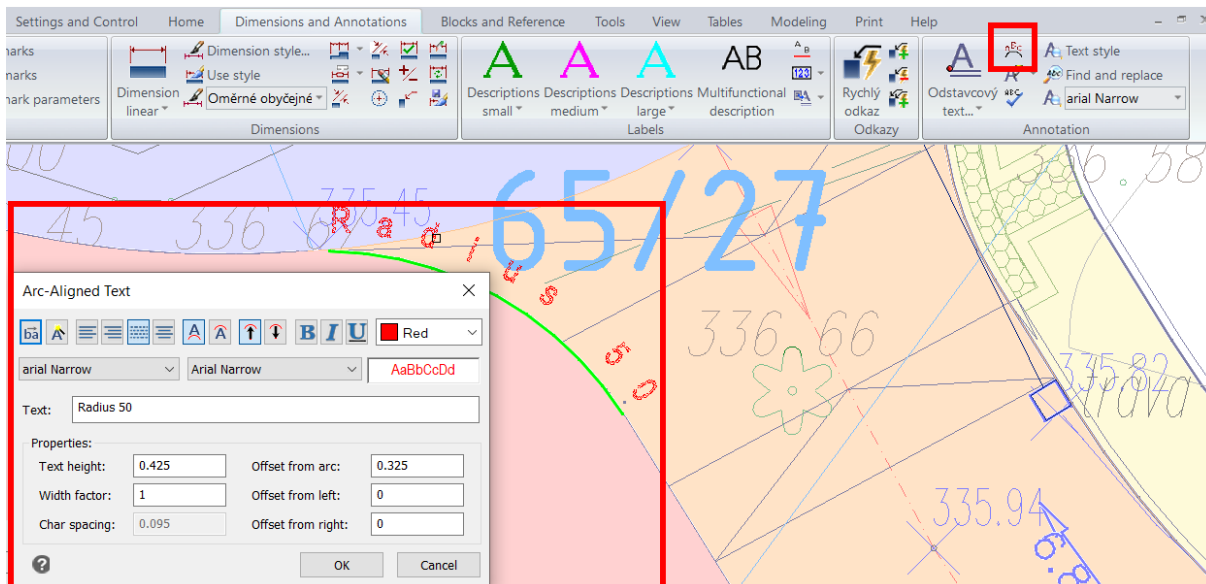
- „_TXTEXP“ – explodes selected text into polylines
- „_TCASE“ – command for a bulk letter size change (changing UPPER/lower case)
- „_TORIENT“ – command for a bulk rotation of selected texts under a chosen angle
- „_TEXTFIT“ – command for a bulk width factor change of selected texts
- „_TJUST“ – command for a bulk justification change of selected texts
- „_SCALETEXT“ – command for a bulk change of text height
- „_TCIRCLE“ – command for a quick framing of any text or attribute definition using circle, rectangle or slot



Pict. New commands for bulk text editing and their position.

Arc-aligned text

Another novelty is a command to write a text along an arc (command „_ARCTEXT“). Simply select an arc, define text formatting and you will draw the text in an arc. The same command can also be used to edit these texts.



Pict. An illustration of the text editor when creating an arc-aligned text.

Settings of the multiline text editor (Mtext)

A new system variable, „MTEXTTOOLBAR“, has been implemented to control the display of Mtext editing toolbar.

- Value 1 = both text editing toolbar and Mtext editing context ribbon are displayed when editing a multiline text
- Value 2 = only the Mtext editing context ribbon (no text editing toolbar) is displayed when editing a multiline text (default value)

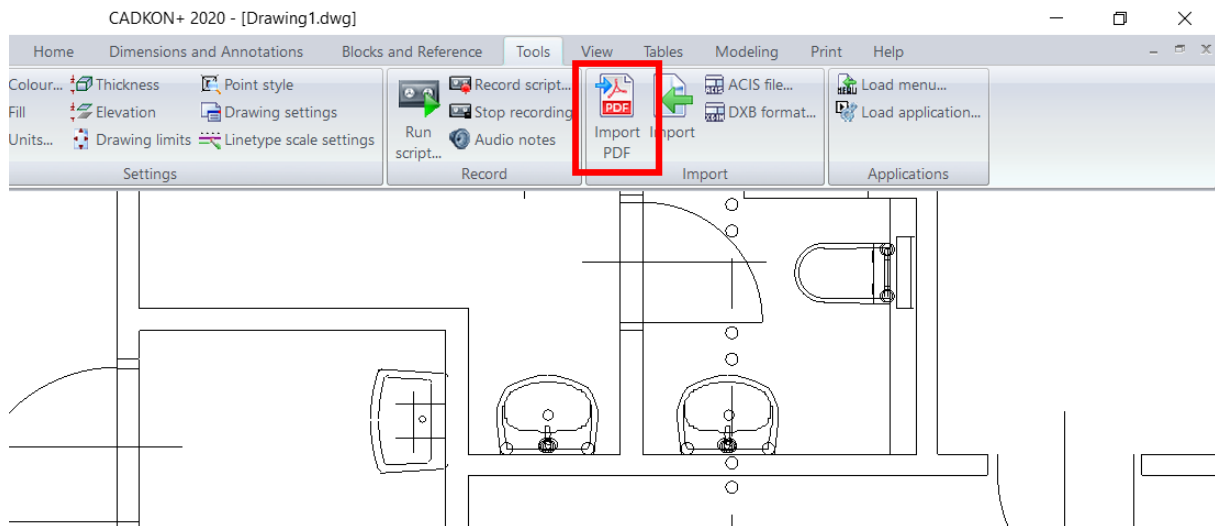
Settings of the single line text editor (Dtext)

As for the Mtext, a new variable, „TEXTED“, has been implemented which controls the way line text is created.

- Value 0 = when creating or editing line text, the editor is displayed in the place of text location (default value).
- Value 1 = when creating line text, it is entered into the command line. When editing line text, the text editor is displayed.
- Value 2 = same as value 0, only the text can be created multiple times.

PDF file import

Version 2020 now allows you to convert contents of PDF file into DWG. You can simply select required PDF file and CADKON+ will import it into the current drawing. The PDF contents is automatically converted to CADKON+ basic objects (line segments, polylines, spline) which you can afterwards work with as usual.



Pict. Location of the PDF import command.

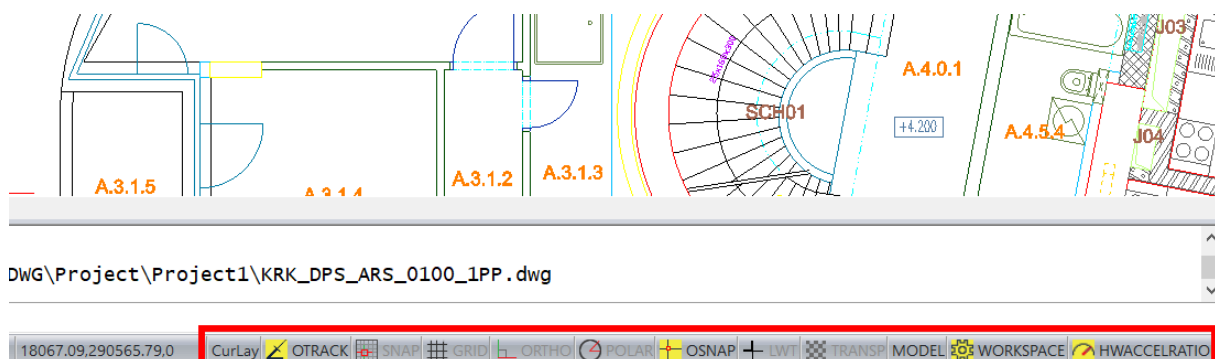
Attribute editor (ATTEDIT)

The attribute editor navigation has been changed. You can proceed to the next line to enter the attribute value using Enter and close the dialog and save the changes by CTRL+Enter. This makes all attribute changes much faster...

Working environment

Modified Status bar

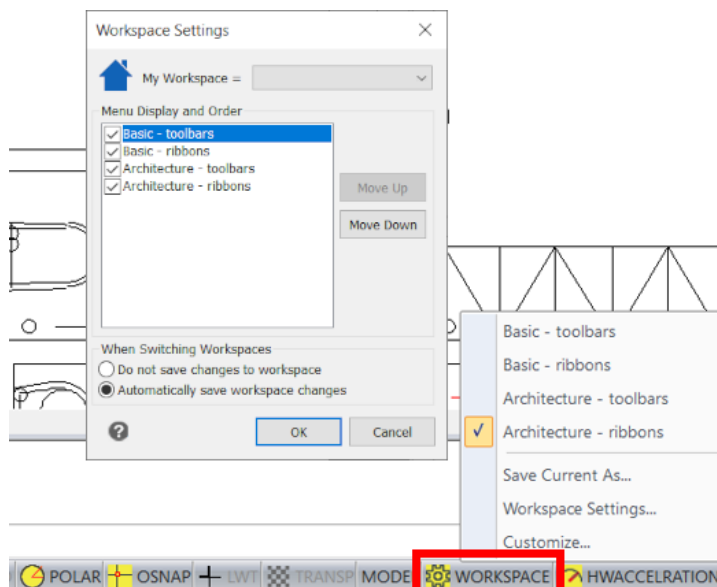
New buttons for workspace settings and hardware acceleration have been added to the Status bar. All the Status bar buttons are now better colour matched.



Pict. Modified Status bar with workspace control and HW acceleration.

Workspaces

Workspaces are now included in the CADKON+ Status bar and they have many more customization options. Workspaces can now be saved under any name and when switching between workspaces, changes in the workspace settings can be automatically saved (variable „WSCURRENT“).



Pict. Workspace control from the Status bar.

Locking toolbars

Both floating and anchored toolbars can now be locked in their position. Once the panels are locked, they cannot be dragged to a different location – it prevents any accidental panel movement. Toolbar lock option is accessible in the right-click menu of any toolbar.

Command line

You can change background or text colour of Command line using new variables.

- CMDLINEBKGCOLOR – command line background colour
- CMDHISTORYTEXTCOLOR – history text colour in the command line
- CMDLINETEXTCOLOR – active line text colour in the command line

Selection window transparency settings

We are bringing back the transparency of selection windows from the version 2018 with added functionality. You can control the selection window transparency with a new variable „TRANSPARENTSELECTION“ (window/crossing).

- Value 0 = non-transparent selection windows
- Value 1 = transparent selection windows (default)

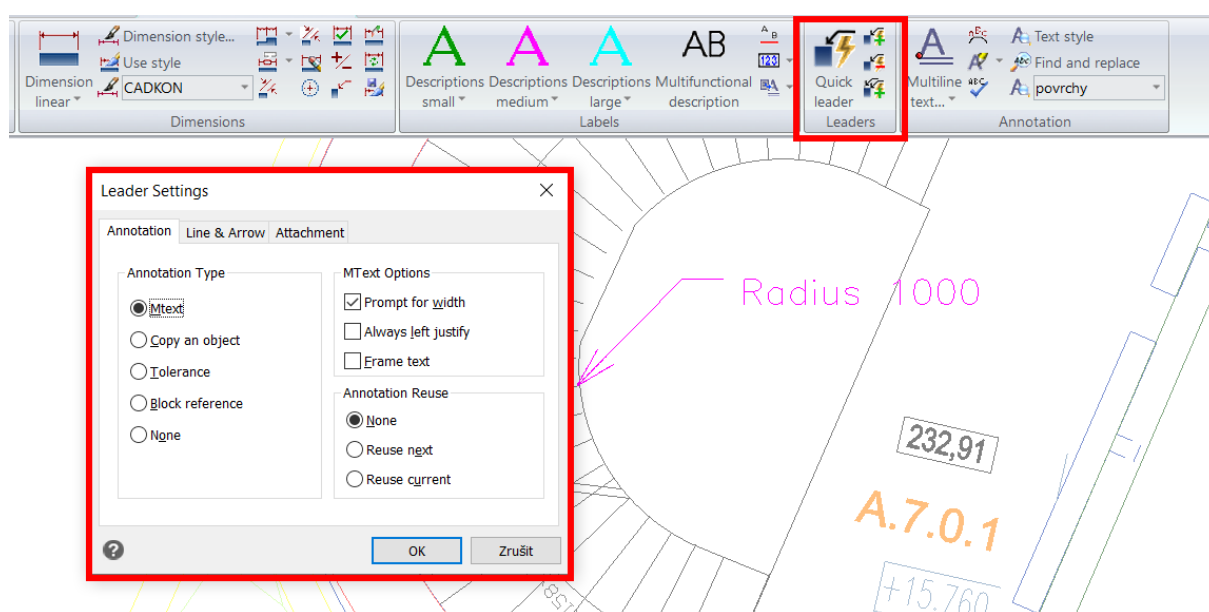
The selection transparency is active only if the variable „TRANSPARENCYDISPLAY“ = 1 is enabled (transparency of Status bar).

Creating and editing leaders

This new version contains commands for creating and editing leaders. The so called Quick leader has now more options than the older type. You can now link Mtext, Tolerance or any block to a leader and the Quick leader has detailed link attachment to Mtext settings, option to restrict angles when creating a leader or option to set leader arrows.

The leaders can be detached or reattached to Mtexts. The new commands are following:

- „_QLEADER“ – command for creating a quick leader
- „_QLDETACHSET“ – command for detaching a leader from a text
- „_QLATTACH“ – command for attaching a leader to a text
- „_QLATTACHSET“ – command for bulk attaching of leaders to texts



Pict. Location of commands for working with leaders and illustration of leader settings.

Layouts and viewports

When you are creating a layout using new system variable „LAYOUTCREATEVIEWPORT“, you can set whether a default blank viewport will be created within the layout.

- Value 0 = default viewport is not created
- Value 1 = default viewport is created (default)

Zooming and view panning is now smoother and faster when working in a layout. When you are creating a copy of a layout, all viewport property settings are carried over (colour, linetype, width, transparency etc.).

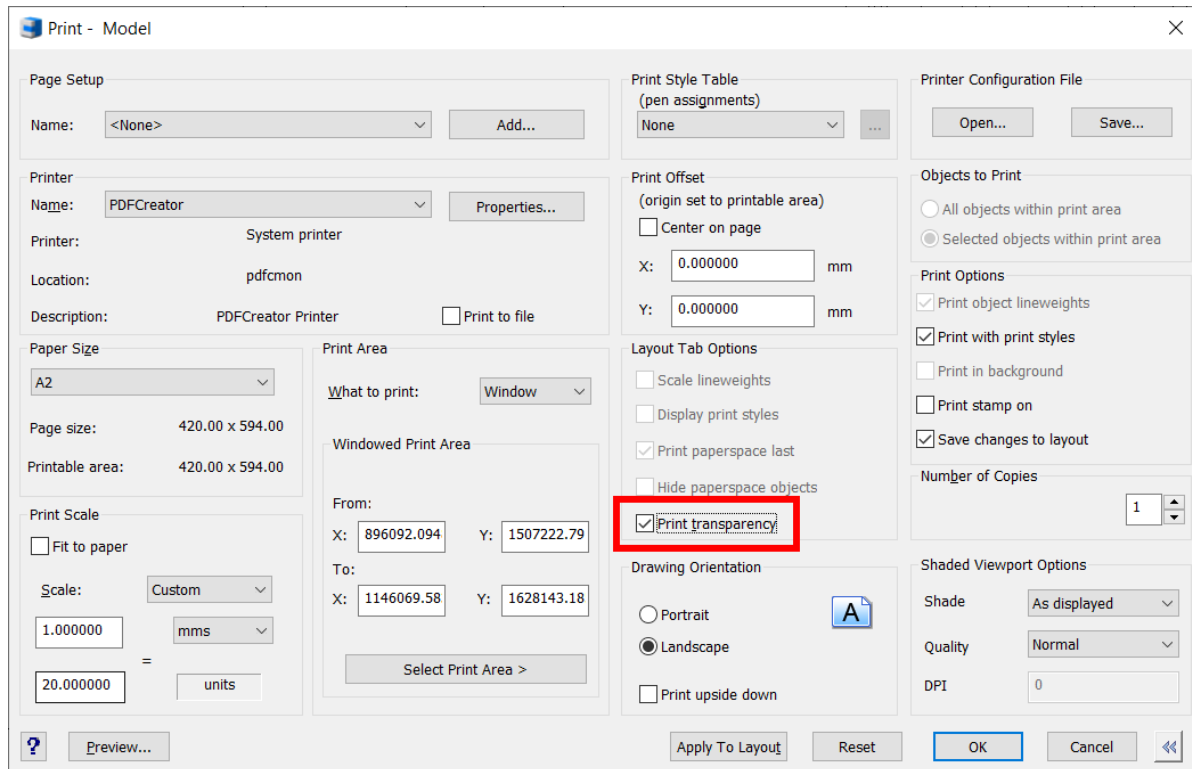
Plotting

The main novelty in printing area is transparency printing settings. If objects or layers have a transparency set, it can now be printed. The transparency printing settings is part of a printing dialog and it can also be globally set by a new variable „PLOTTRANSPARENCYOVERRIDE“.

- Value 0 = transparency print is disabled

- Value 1 = transparency print follows settings in the Print dialog (default)
- Value 2 = transparency print is always enabled.

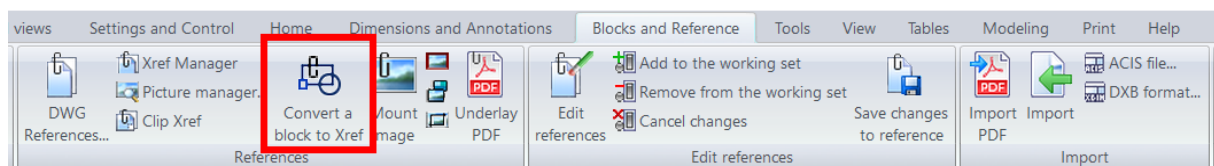
In page settings, „previous printing“ option remembers printing area even within another open drawing.



Pict. New print transparency settings.

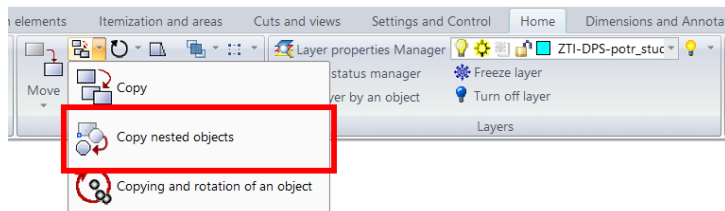
Blocks and references

Any block in the drawing can be easily converted to an external reference using a new command „_INSERTTOXREF“. Simply select a block and then you enter a path to a destination of a newly created reference and the selected block will be converted to an XRef.



Pict. Location of the new command for converting blocks to XRefs.

You can also use a brand new command „_NCOPY“ to copy objects embedded in blocks or external references. It enables very quick and comfortable copying of embedded objects saving several steps.

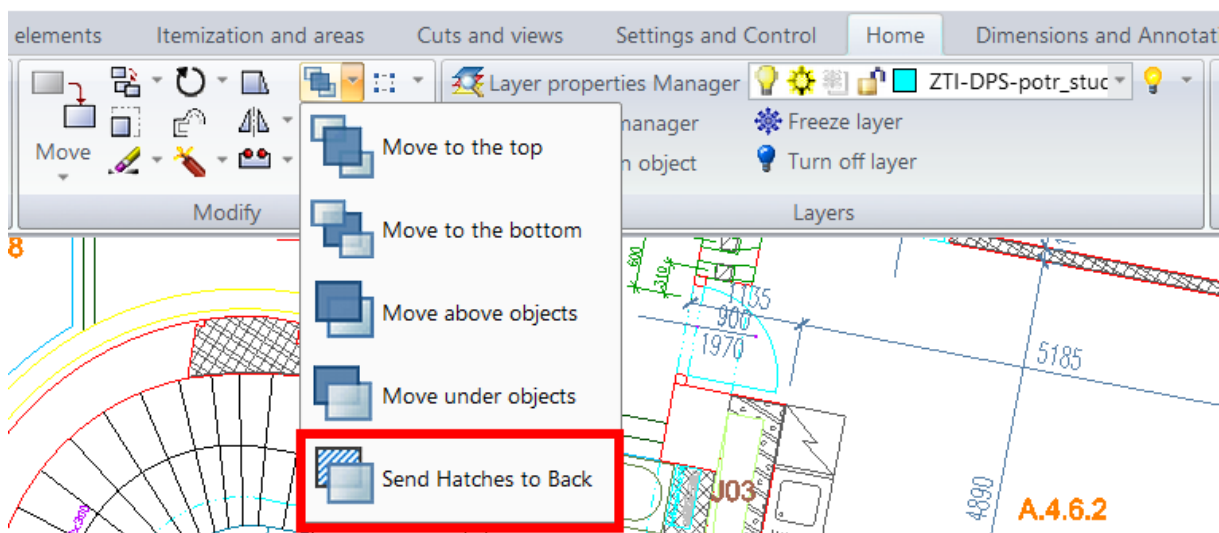


Pict. Location of the new command for copying embedded objects.

Hatches

Hatch patterns are sorted alphabetically and the hatch pattern SOLID is always at the beginning of the hatch pattern list.

If you need to quickly transfer hatches to the background, the version 2020 contains a new command „_HATCHTOBACK“ which simply transfers all hatches behind all objects (the command is not implemented in CADKON+ Basic).



Pict. Location of the command for transferring hatches to the background.

Other

- Accelerated creating of equidistant from a polyline with a large number of vertices.
- Equidistant can now work with objects having a rotated Z-axis normal.
- Key shortcut CTRL+F for SNAP setting added.
- Key shortcut CTRL+L for ORTO setting added.
- Command „DDEDIT“ now supports <> symbols to maintain dynamic values of a dimension.
- Option to fillet/chamfer a construction line (XLINE).
- Better optimization of SNAP on an embedded block inside an XRef.
- Trim/ Extend/ Fillet/ Chamfer/ Break/ Join – improved functionality of those basic commands in very high coordinates.
- Simple option to remove dimension text overwriting using a new command „_DIMREASSOC“.
- A new setting to suppress Annotation object selection notification was implemented to CADKON+ settings (only in modules CADKON+ Architecture and MEP).

CADKON+ ARCHITECTURE News

Room descriptions

Given the popularity of this CADKON+ feature among users, the room descriptions contain many news and improvements. Many of them have been implemented based on specific requirements and the room description functionality has been even more upgraded.

Adding and subtracting room area

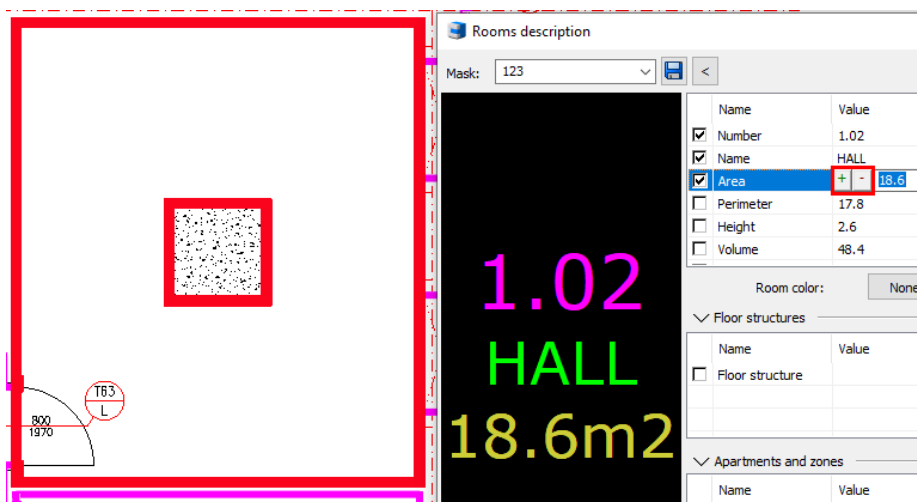
Room areas can be added or subtracted when creating a room description. It makes possible to subtract e.g. columns, vents etc. from the room area or select more areas from which the final room area is calculated.

- The room area can be added/subtracted from the drawing using +/-

	Name	Value
<input checked="" type="checkbox"/>	Number	1.02
<input checked="" type="checkbox"/>	Name	ROOM
<input checked="" type="checkbox"/>	Area	+ - 19.6

Pict. Icons for adding (+) and subtracting (-) room area in the drawing.

- Adding/subtracting of the area can be done by selecting a polyline, hatch or point.
- While creating the description, selected areas will be highlighted in red to increase clarity.



Pict. Highlighting of the subtracted room areas in the drawing when creating a description.

- Value of the subtracted area is highlighted in green if it is associated with polylines (hatch).

<input checked="" type="checkbox"/>	Area	19.6
-------------------------------------	------	------

Pict. Highlighting a value of an associated area in green.

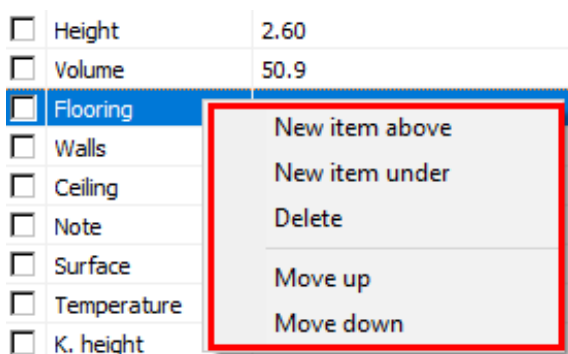
Parameter settings for individual items

- Each item allows you to set text, text height, colour and layer.

Text style	Text height	Underline	Text color	Text layer
Standard	2.5	<input type="checkbox"/>	ByLayer	CKDESCRIPTIONM
Standard	2.0	<input type="checkbox"/>	ByLayer	CKDESCRIPTION.
Standard	2.0	<input type="checkbox"/>	ByLayer	CKDESCRIPTION.

Pict. Parameter settings option for individual items.

- The context menu provides options to create new items, delete existing items and move item position in the list.

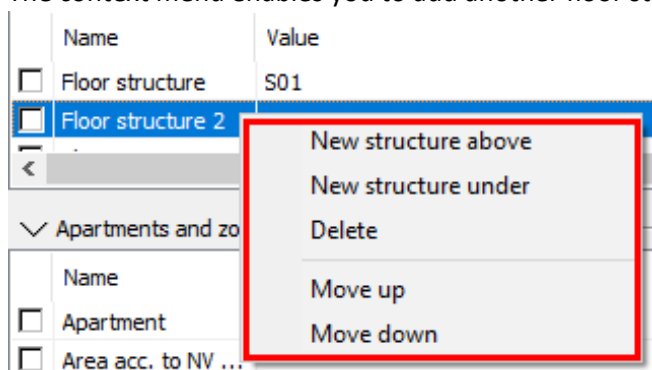


Pict. Context menu with option to create and move items.

Multiple floor structures in one room

When setting the room parameters, you can define multiple floor structures. This allows you to assign and display more floor structures in one room.

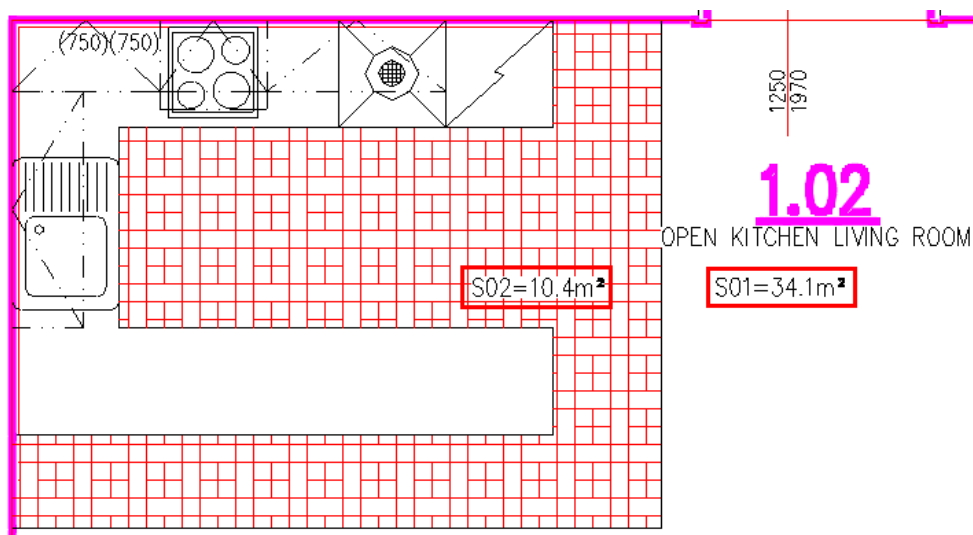
- The context menu enables you to add another floor structure.



Pict. Context menu for creating new floor structures in one room.

- If only one floor structure is defined the structure area is automatically set as equal to the room area. If necessary, the area can be modified by adding or subtracting additional areas.
- In case of more floor structures within one room, there is an option of automatic subtracting of individual floor structures, including their automatic association to the respective polylines. Subtracting the areas of the floor structures can be done by selecting a polyline, hatch or point.

- Automatic rendering of boundary polylines of individual floor structures into a layer specified by a key CKRDESCRIPTION_AREA_STRUCTURE.
- Value of subtracted floor structure will be highlighted in green when it is associated with polylines (hatches).
- Automatic update of floor structure areas.
- Option to display individual floor structures including areas in a rendered room description.



Pict. Displaying of multiple floor structures including the areas in the room description and their manual placement in the drawing.

- Floor structure section can be minimized in case the user does not need to use it.

<input checked="" type="checkbox"/> Floor structures			
	Name	Value	Area
<input type="checkbox"/>	Floor structure	S01	6.0
<input type="checkbox"/>	Floor structure 2	S02	10.4

Pict. Option to minimize Floor structure section

Apartments and zones

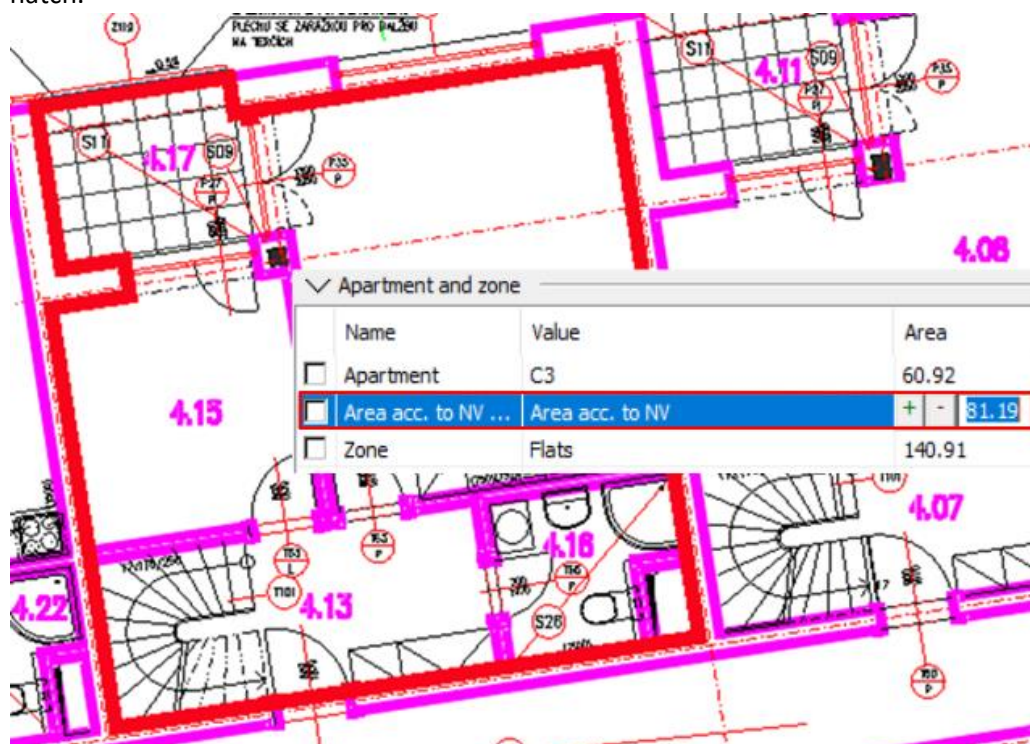
For each room you can define in which apartment or zone it is located. Individual apartments or zones can be then reported in separate tables including a report of apartment areas in accordance to the Government Regulation 366/2013. Moreover, you can define a colour for each room or a zone colour and create a colour-coded map of apartments and zones.

- You can define location of each room in an apartment or a zone.

▼ Apartments and zones			
	Name	Value	Area
<input type="checkbox"/>	Apartment	27	87.4
<input type="checkbox"/>	Area acc. to NV ...	85.26	93.3
<input type="checkbox"/>	Zone	FLATS	205.6

Pict. Option to set which Apartment and which Zone room belongs to.

- Automatic calculating of apartment and zone areas.
- Possibility to define and report areas in accordance with the GR 366/2013 using a polyline or hatch.



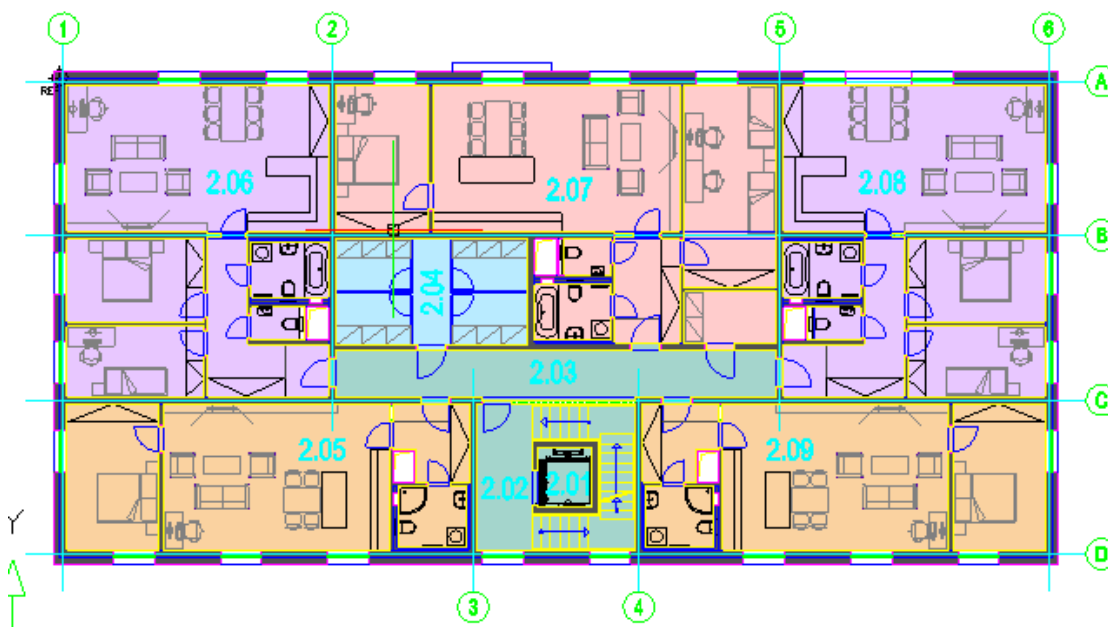
Pict. Adding area GR 366/2013 from polyline.

- Automatic rendering of area boundary polyline according to GR in a layer specified by key CKRDESCRIPTION_AREA_GR.
- Bulk parameter copying using the Room Explorer.



Pict. Bulk Room color copying using Room Explorer.

- Each room can have defined its (apartment) colour or zone colour.
- Automatic rendering of room (apartment) and zone hatches into layers using keys CKRDESCRIPTION_COLOR_ROOM and CKRDESCRIPTION_COLOR_ZONE. You can then turn on and off the colour coded map of apartments and zones with one click.



Pict. Colour-coded display of individual apartments (or zones).

- Apartments and zones section can be minimized in case the user does not need to use it.

<input checked="" type="checkbox"/> Apartments and zones			
	Name	Value	Area
<input type="checkbox"/>	Apartment	A12	0.0
<input type="checkbox"/>	Area acc. to NV ...		0.0
<input type="checkbox"/>	Zone	Living	0.0

Pict. Option to minimize Apartments and zones section.

Room tables

Based on the user requirements, we added an option to report separate tables of apartments and zones.

- Reporting into separate tables of room by apartments and zones enables you to report each apartment or zone into one table including a list of all rooms within the apartment or zone.
- Option to report areas of individual apartments according to the GR 366/2013 into separate lines.

APARTMENT D 64 (2+KITCHEN)				
NO.	NAME	AREA [m ²]	FLOOR	NOTE
D 64.01	HALL	5,30	CERAMIC FLOOR	
D 64.02	BATHROOM	4,34	CERAMIC FLOOR	
D 64.03a	LIVINGROOM + KITCHEN	23,19	WOOD FLOOR – OAK	CHECK FLOOR
D 64.03b	BEDROOM	14,11	WOOD FLOOR – OAK	
D 64.04	TERRACE	9,91	CERAMIC FLOOR	

Total area [m2] 46,94

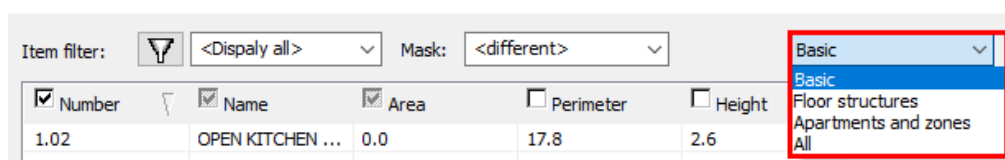
APARTMENT D 65 (1+KITCHEN)				
NO.	NAME	AREA [m ²]	FLOOR	NOTE
D 65.01	HALL	6,52	CERAMIC FLOOR	
D 65.02	BATHROOM	4,11	CERAMIC FLOOR	
D 65.03	LIVINGROOM + KITCHEN	20,78	WOOD FLOOR – OAK	CHECK FLOOR
D 65.04	TERRACE	5,39	CERAMIC FLOOR	

Total area [m2]: 31,41

Pict. Room table for individual apartments including apartment floor area and area according to the GR 366/2013.

Room Explorer

- Option to switch between 4 display types of Room Explorer which determine displayed columns: Rooms (Basic), Floor structures, Apartments and zones or All.

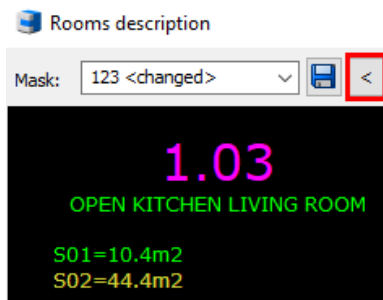


Pict. 4 display variations of items (columns) in the Room Explorer.

- Option to copy new parameters: floor structures, apartment label, zone label, room colour, zone colour, transparency etc.

Reading description appearance

- Option to read the description appearance from the drawing. User can set where the resulting room description item will be placed.
- The description taken from the drawing can be saved to the description mask. That can be then used, for example, to copy the description appearance to all (or selected) room descriptions in the drawing (using the description manager).
- The description preview allows zooming



Pict. Customized description taken from the drawing.

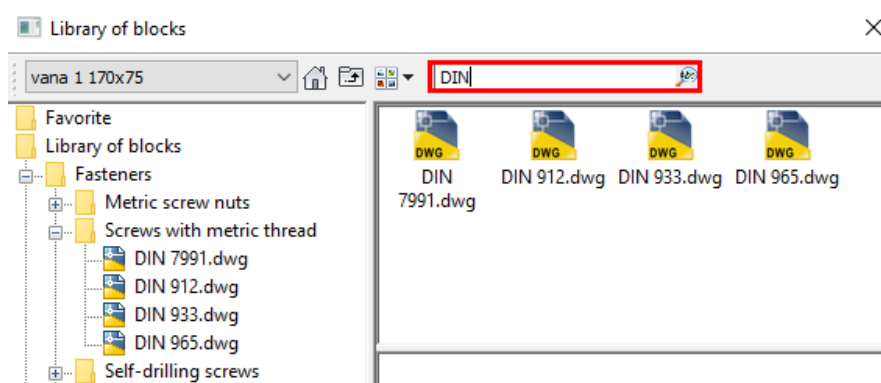
Block library

The block library now offers two improvements that will speed up your work with this extensive library.

Searching in the library

For a quick search option, a search box is added to search for a specific block, block group within DWG or a whole folder, according to the entered expression.

- To search, type in the keyword and click on the magnifying glass icon.
- The search for the keyword can be targeted to a specific part of the library by selecting this part of the library in the left part of the window where the library tree structure is displayed.
- All search results are displayed in bulk in the main library folder and they are also available in the filtered library tree structure.
- The search engine searches for the keyword in folder names, DWG file names and block names.
- The searched keyword can be completed with so called regular expressions, wildcard or complementary. For example, character „?“ stands in for any single character, so typing „bath?“ will search also for „baths“ and so on.

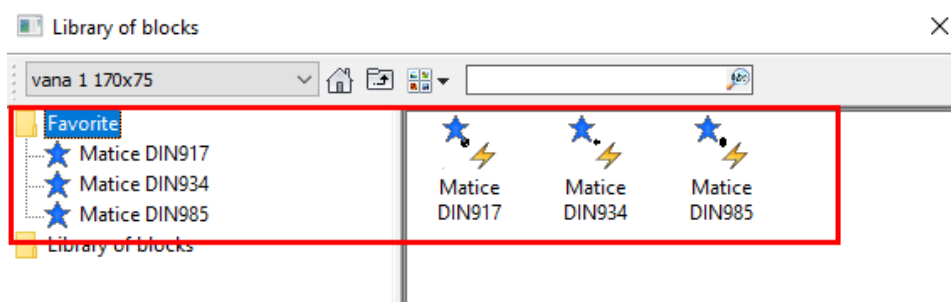


Pict. Search box for typing a searched keyword in the block library.

Favourite blocks

Frequently used blocks can be labelled in the library as favourites and you can have them all available in one folder.

- After a block is labelled as a favourite, it is automatically available in the Favourites folder.
- A favourite block is labelled with a blue star in the block icon.
- Adding or removing the favourite label can be done by the right-click menu.

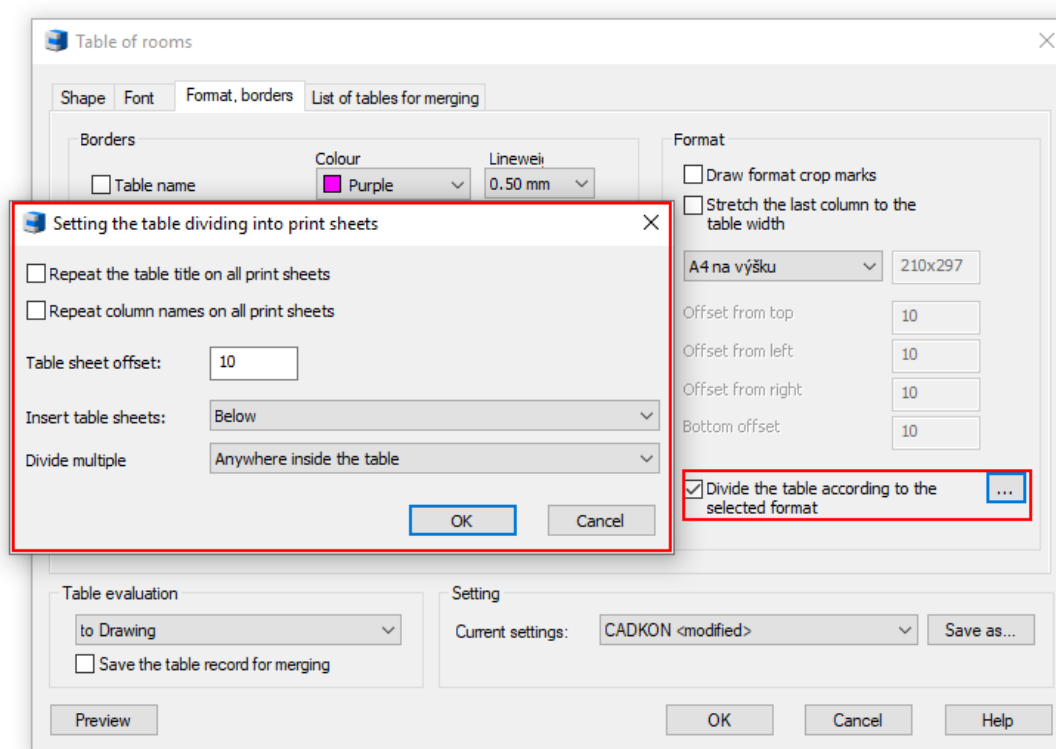


Pict. Favourite blocks available in a single folder and their label with a blue star in the block icon.

Tables

Dividing tables according to the selected format

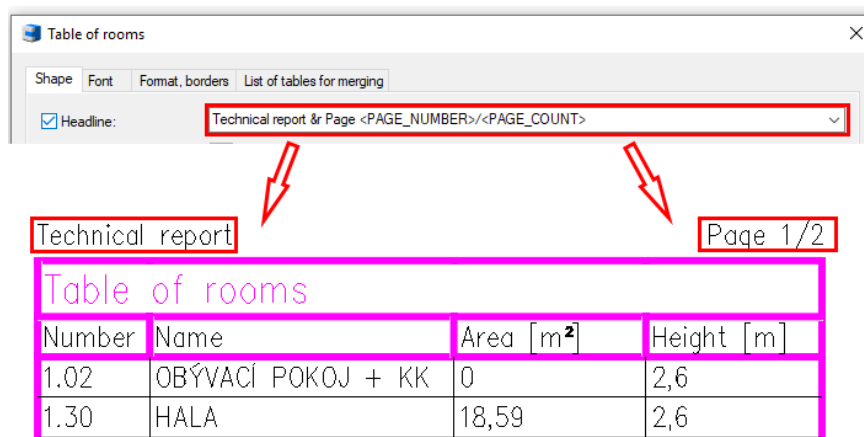
- Option to divide tables on individual print sheets according to the selected format when rendering the table in a drawing. The table size can be set according to the paper size or specified manually according to required dimensions.
- Individual table sheets can be rendered into the drawing below one another or side by side with the option to set relative offset of each table sheet.
- Option to repeat the table title and column names for each table sheet.



Pict. Settings of table dividing into print sheets according to the selected format.

Table header and footer

- Option to use a special header and footer format entry that allows to align the text to the left, right or centre and to insert a sequence number of the print sheet and the total number of print sheets.



Pict. Table header setting and its rendering into a drawing.

Lintels

There has been a complete update of the lintel manufacturers' assortment.

Manufacturer database update

- Weight update for POROTHERM, LIAPOR, PORFIX lintels. Change in lintel labels affected YTONG, BATIMA, Hodotharm KMB products.
- A new lintel 1000x250x75 was added to the PORFIX product range, a new lintel KMB 3500 from Hodotharm, series 7DF was added to KMB Sendvix product range. BS Group added new lintels 115, Nn, Nv, Zn, Zv and you can now find U-profiles, UPA and boxes at YTONG.

Ceilings

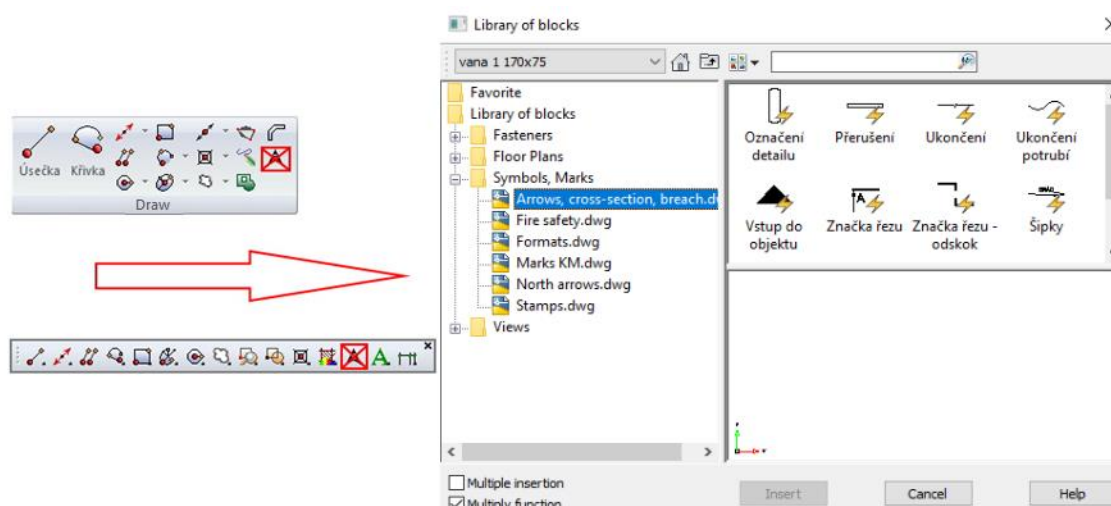
There has been a complete update of the ceiling element manufacturers' assortment.

Manufacturer database update

- Beside updating dimensions, weights, beam or insert names, their placement and axial distances, following products we added:
 - Ytong - beam Y175C 7,60, insert YTONG+ 100 height 125
 - GARPET - Insert VST8 mega
 - TRESK - New TR145
 - POROTHERM - Miako 25/50BN, Miako 25/62,5BN
 - Beton Hronek - series PZD.../10
 - Prefa BRNO - PPD/200, PPD/265, PPD/400, Lightweight ceiling panels w 590 and 1190
 - Dobiáš - Alidal 210/600
 - Ytong – ceiling tiles: Ytong 125, 150, 175, 300
 - GOLDBECK - (SPG20295, 20597, SPH 25406.....)

Symbols

- The original „Symbols“ block menu was moved from ribbon/toolbar „Draw“ to the block library > Symbols, Marks > Arrows, cross-sections, breach.

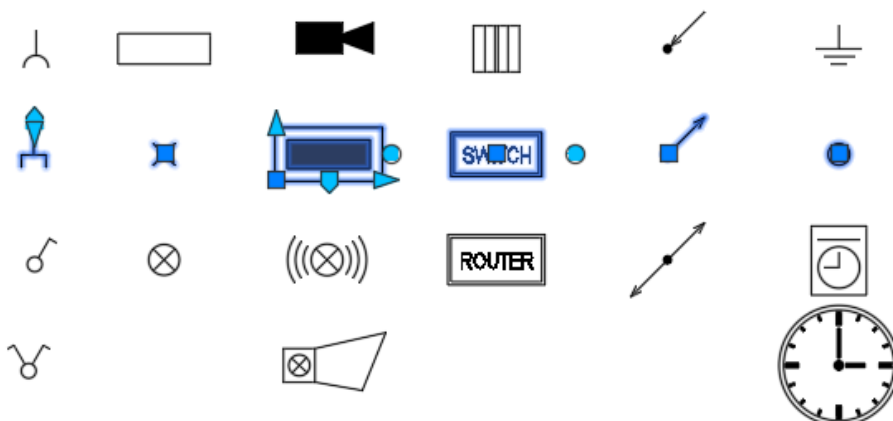


Pict. The block menu „Symbols“ is moved to the CADKON-m library > Symbols, Marks.

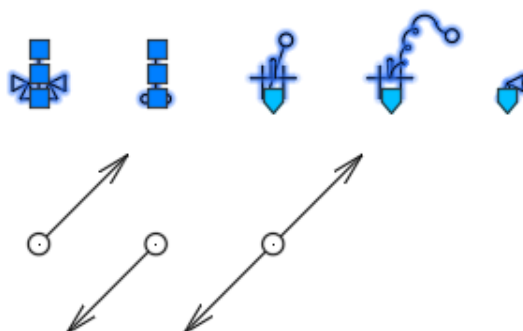
Dynamic blocks

New dynamic blocks (_CK_INSERT_M) were added to the Block library.

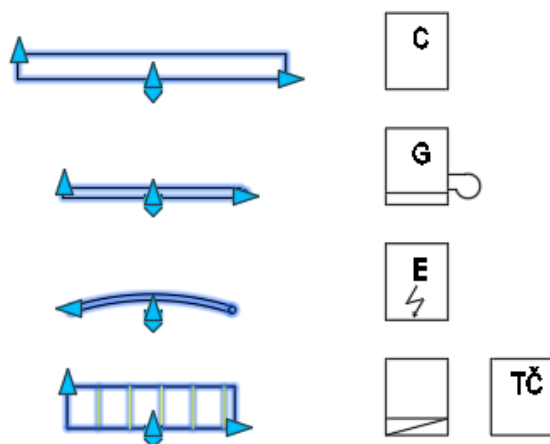
- Floorplans\MEP\electroinstallation.dwg - new dynamic blocks for drawing electroinstallation elements – marks of sockets, lights, cameras, switchboards, wiring, clocks etc.



- Floorplans\MEP\sanitary.dwg - new dynamic blocks for drawing sanitary elements – different types of taps, outlet valve, riser marks.



- Floorplans\MEP\heating.dwg - new dynamic blocks for drawing heating elements – different types of radiators and boilers.



- Floorplans\MEP\Air-con.dwg - new dynamic blocks for drawing air-conditioning elements – air-conditioning unit, different types of anemostats, exhaust grill and diffuser.



CADKON+ RC News

Placement of rows of bars into a variable cross-section

A new command (AbRcRowBetweenCurves) will place the selected bar along the specified curve and the segment lengths of variable length item are adjusted to the trimming curves, which can be specified in different structure views.

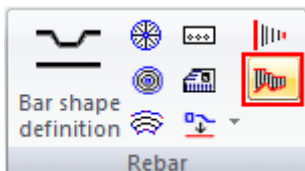


Fig. Icon of the tool Placement of rows of bars into a variable cross-section.

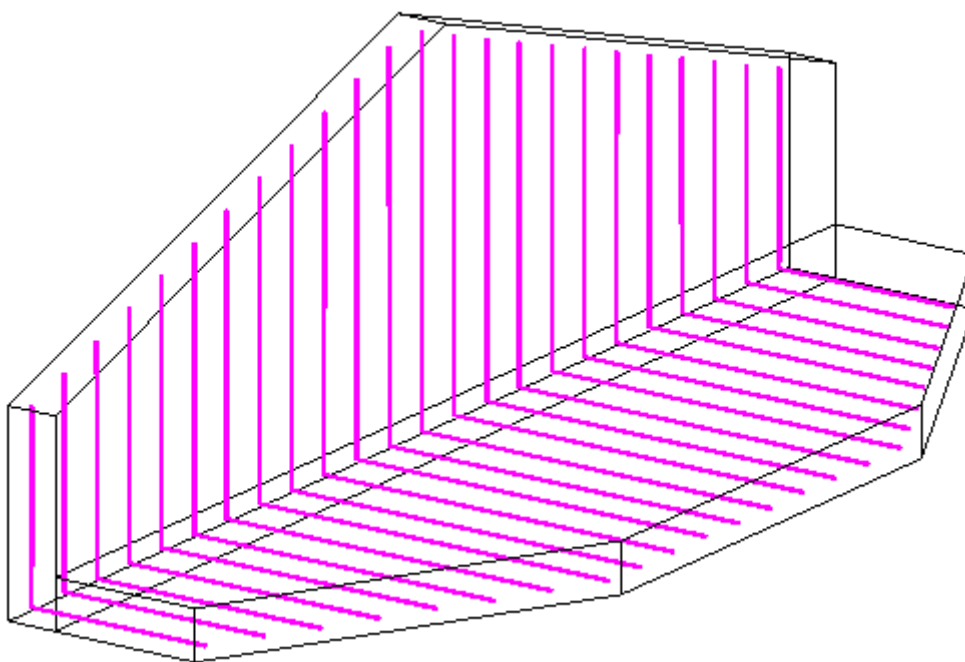


Fig. Construction reinforced by variable length item.

You can specify the curve with points or you can select an already existing curve. In the next step, you can specify trimming curves for individual bar segments. Trimming curves can be entered in different views or different 2D sections respectively. That means that it is possible to create a row of bars with variable segment lengths in several directions in one programme. Segments with length changing according to the trimming curves must be released in the dialog panel Releasing of bar segment in the variable length item. Here you can only release segments in a way that the angles between segments will be maintained.

Item unification

A new command (AbRcItemUnification) allows you to reduce the number of different items that differ only within specified limits.

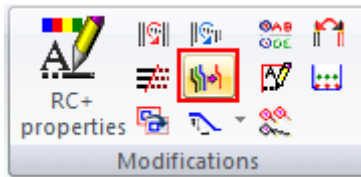


Fig. Item Unification Command Icon.

When defining the shape of a new bar, the programme automatically checks whether the new item matches any previously defined item in the drawing. If a match is found, the new item is not created but the existing item is used. However, in practice, it can happen that different items, varying only in details, will be created. Such items can be later unified.

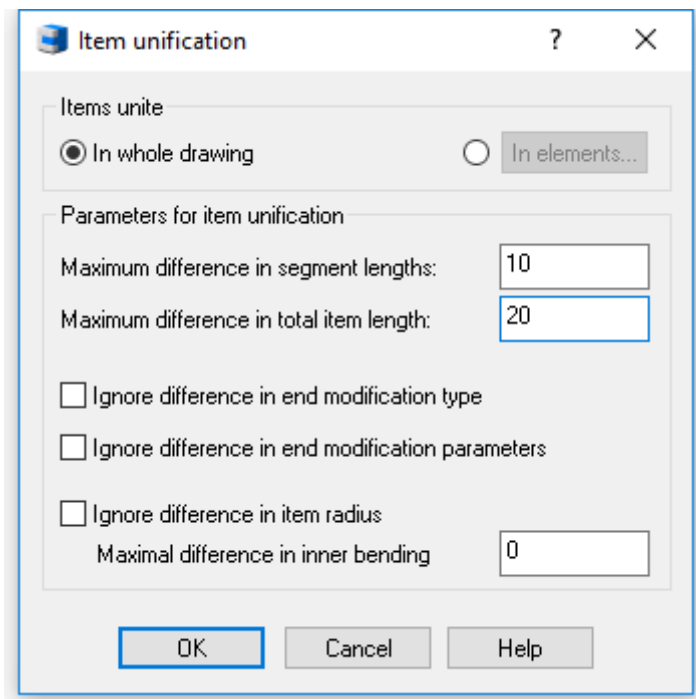


Fig. Parameters to unify items.

Merge / Split description

A new command (AbRcModiCompDesc) allows multiple descriptions of the same item to be merged into one or split a description that refers to multiple bars.



Fig. Icon of command to merge or split bar label.

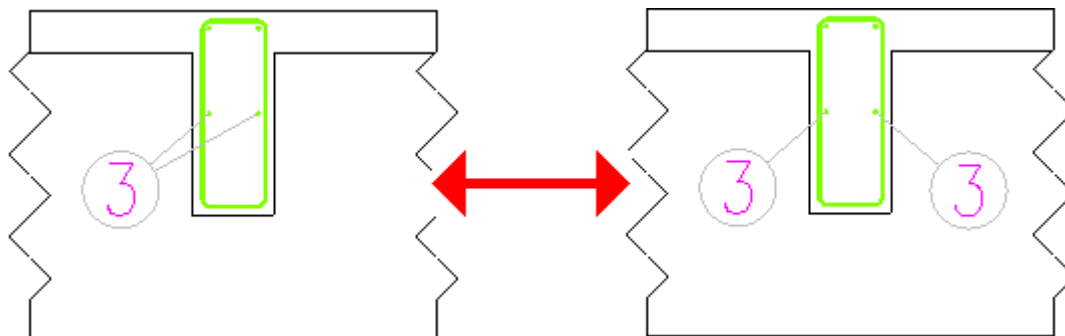


Fig. Merged and split bar labels.

Creating a row of variable length items

A new command (AbRcCreateVarRow) creates a row of variable length items from individual bars. In order to use the command, the view must be set to a perpendicular to the bar plane, i.e. a view in which the bar appears as a line segment.



Fig. Command icon for creating a series of variable length item.

Bending detail alignment

A new command (AbRcBarSummaryAlign) is designed to align already generated item bending details.

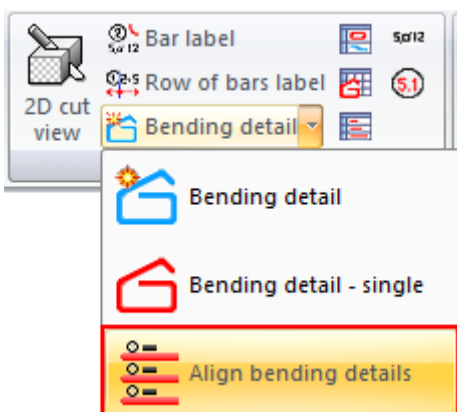


Fig. Command icon for aligning of bending details.

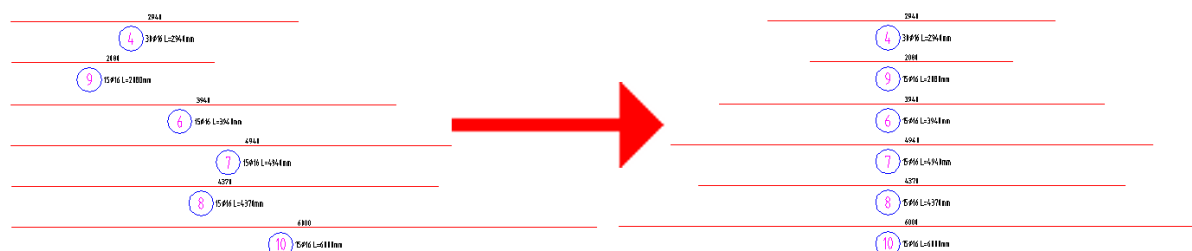


Fig. Bending details before and after alignment.

Circular stirrup overlap editing

A new command (AbRcRingOverlap) allows you to edit the overlap or total length of the circular stirrups. Editing can be done on bars in a view or on a 3D model.

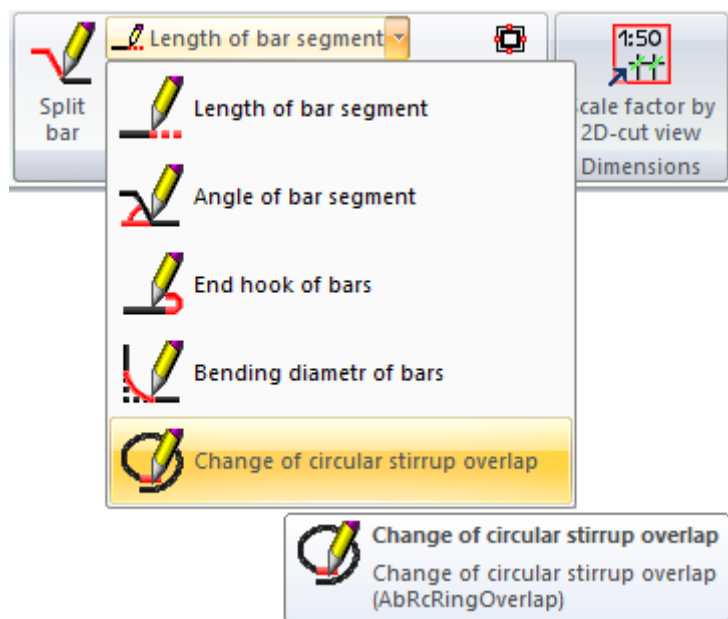


Fig. Command icon Circular stirrup overlap editing.

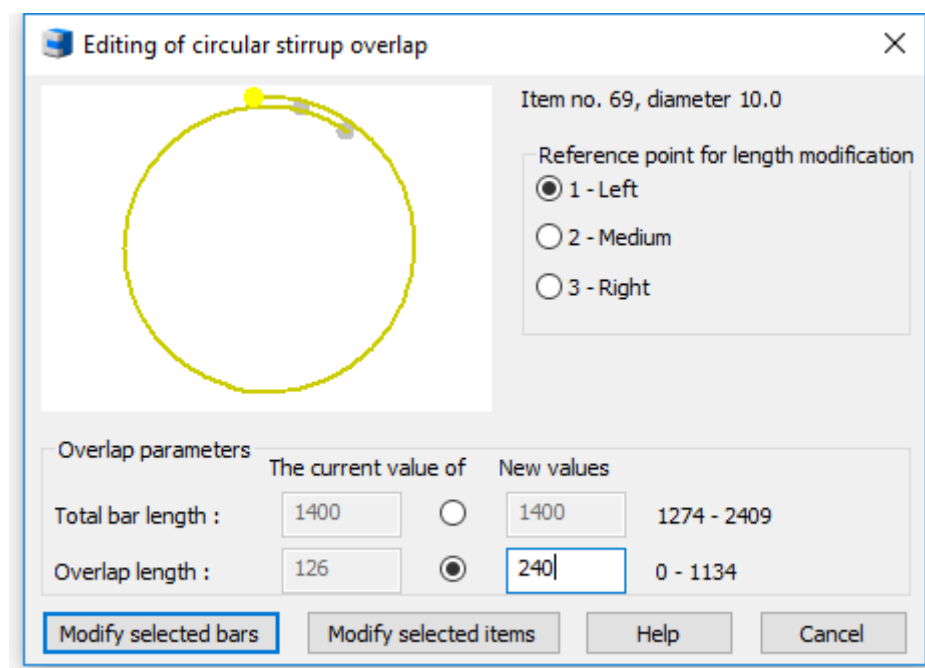


Fig. Dialog with parameters to change circular stirrup overlap.



Fig. Circular stirrup before and after overlap change.

Bar editing on bending detail

A new command (AbRcBarSummaryEdit) is designed to change an item throughout the whole drawing. The dialog panel contains the same options as the standard Change properties panel, if a rebar is selected. Bar editing on bending detail allows you to edit directly the bar segments in the list at the bottom of the dialog panel.

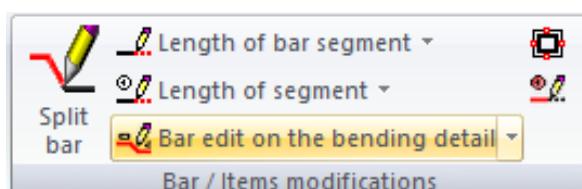


Fig. Icon for Edit Bar on Bending detail.

Properties modification in bending detail

Item number
☒ Do not modify 1
☐ In interval of 0 - 0
☐ Last: 2

Diameter < 20.0 Steel < B550B

Modify automatically
☐ Inner bending diameter < 140 ☐ Cover

Bar type: Bend Cut-off coefficient: Shape name: A2

Rounding
 Parameters... : segments 10.0000 Total length: 10.0000

Segments measurement type: Calculation method of the bar length
☐ On axis ☒ Sum of segments
☒ On edge ☐ Based of centreline

End modification... Bending diameter...

Segment: Reference point and ref. angle < No reference point and ref. angle has been

Section no.	Length	Angle	dx	dy
1	430	90.0000	0	430
2	5830	0.0000	5830	0

Apply Modify selected items Cancel Help

Fig. Property Change Dialog.

Bar segment length editing on bending detail

A new command (AbRcSecLenChanScheme) allows you to change the item segment lengths by specifying a new segment length on bar bending detail.

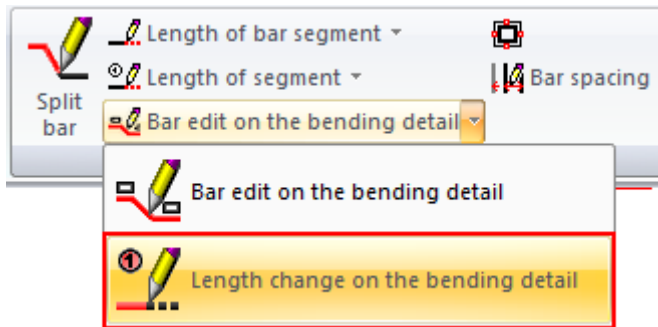


Fig. Command icon for editing the length of segments of the bar on bending detail.

Tables

For all 3 table types, a new option to save or load table settings into / from *.bin file is available.

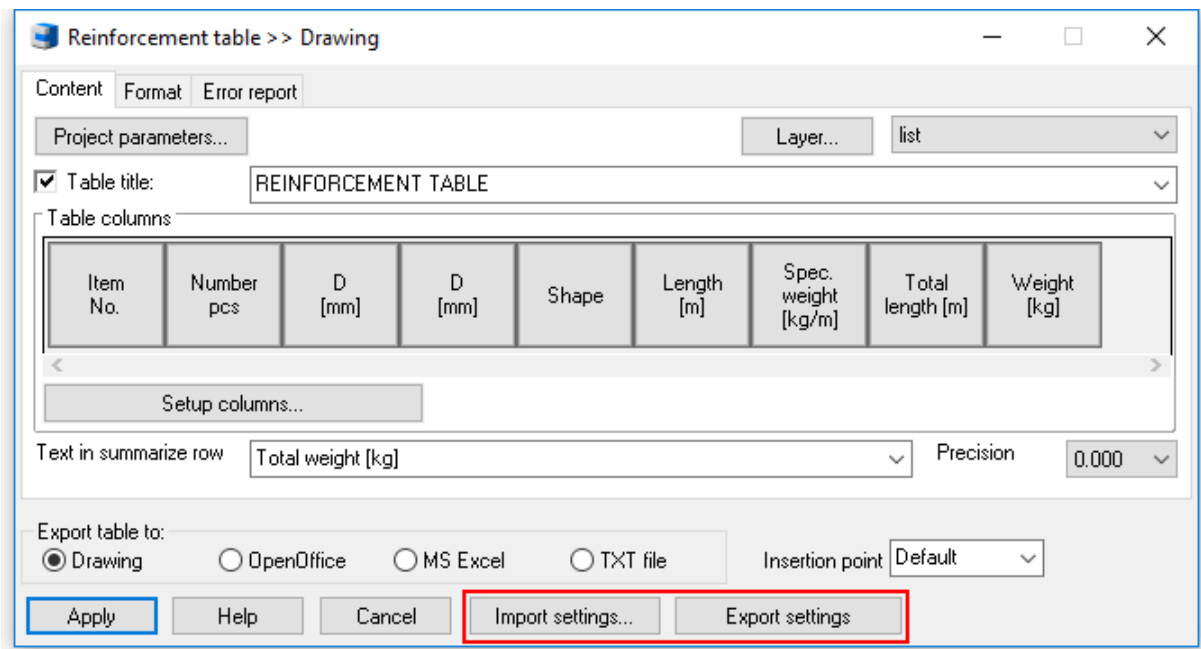


Fig. Buttons to import and export table settings.

This option comes useful when you want to back up your settings or transfer them to a different workplace.

Settings migration

A new tool, RCMigrator.exe "CADKON+ RC 2020 – Settings migration" enables transferring settings from the previous version. The oldest version that can be migrated is version 2019. The migration transfers only those settings saved in Windows registry, not the data files.

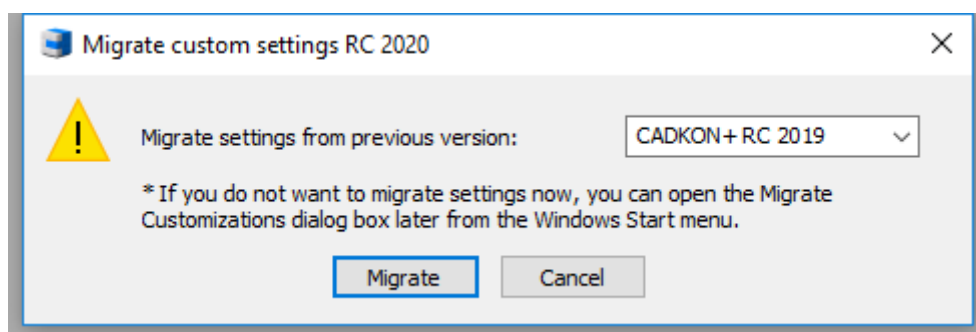


Fig. User settings migration option dialog box from previous version.

Dialog offering the migration will appear on the first start of CADKON or you can initiate the migration anytime later from the Windows menu.

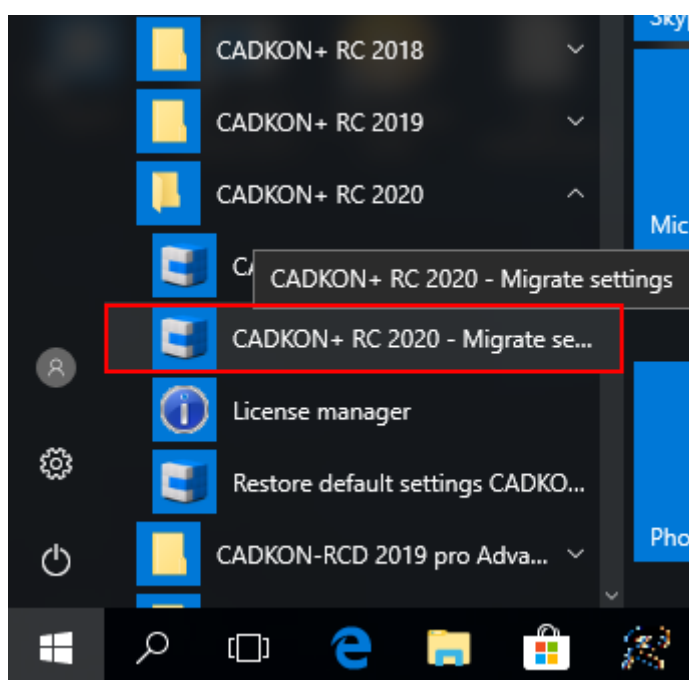


Fig. Location of the settings migration tool.

Bar settings – a new way of total bar length calculation

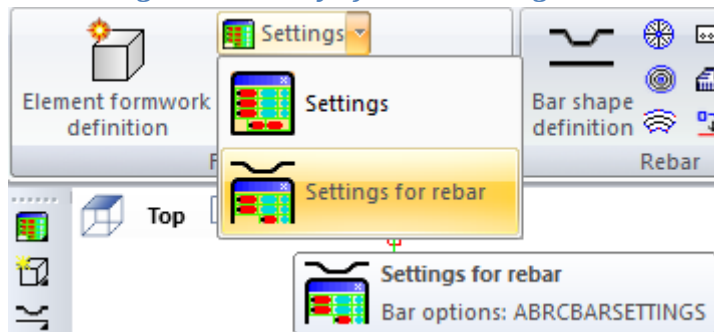


Fig. Icon of Bar settings command.

In the Parameter settings dialog, you can find another new way of measuring the total bar length – exact total length option. There are now following 2 options of determining the total bar length:

1. Sum of legs: The total length is calculated as a sum of leg lengths shown on the bar bending details whereas the leg lengths in this case depend on the way of the leg measuring (To axis / To edge). Bar filleting is neglected.
2. Exactly on the axis: The total shearing length of the bar is determined as the exact axial length of the bar.

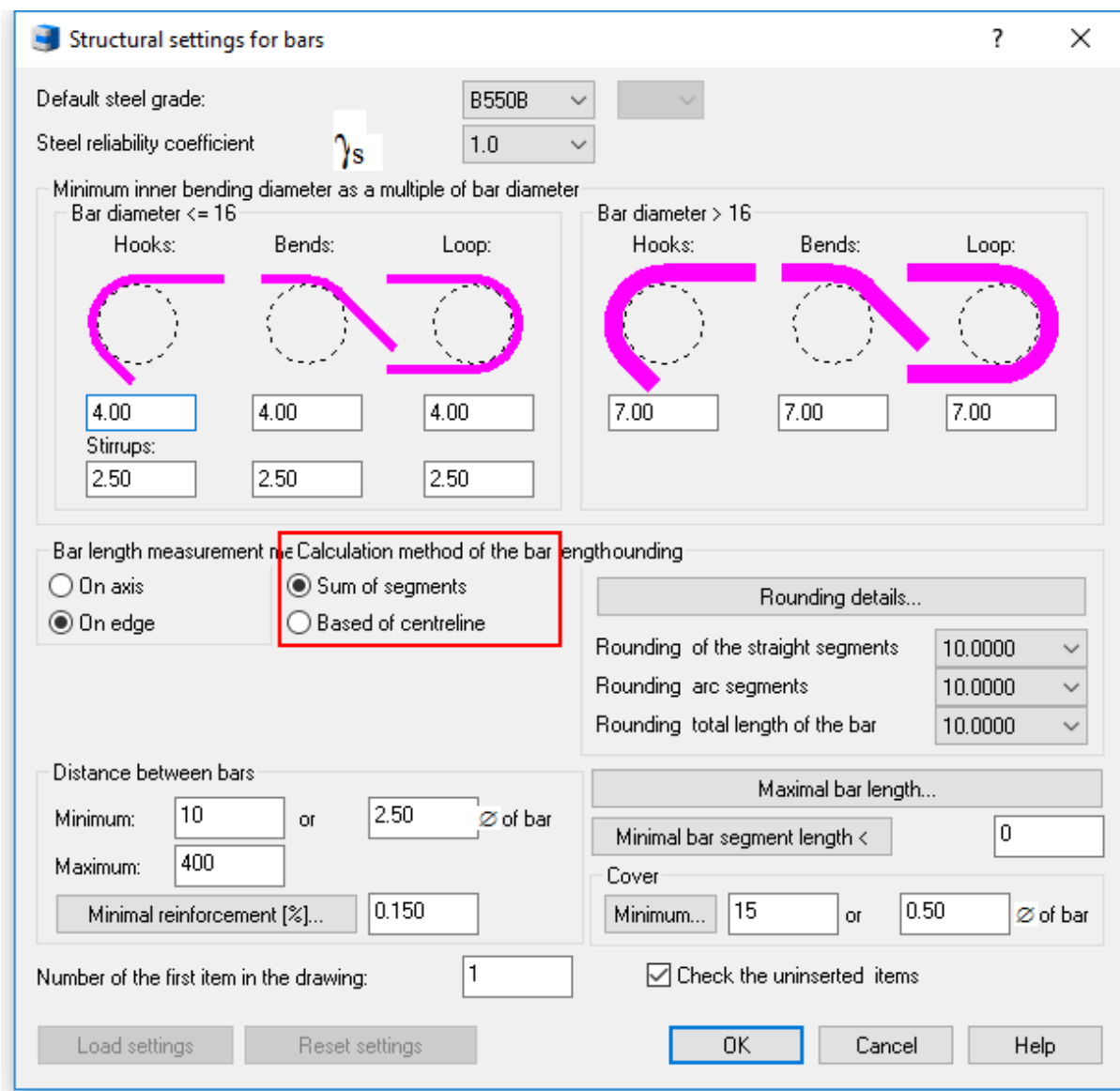


Fig. New options for calculating the overall bar length.

Option to determine the way of leg length measuring was removed from the dialogs where the bar shape is defined, however, this option has been retained for bar editing.

Description of bar of variable length item

A new command (AbRcVarAutoDesc) allows you to create a description for each individual sub-item of a variable length item.

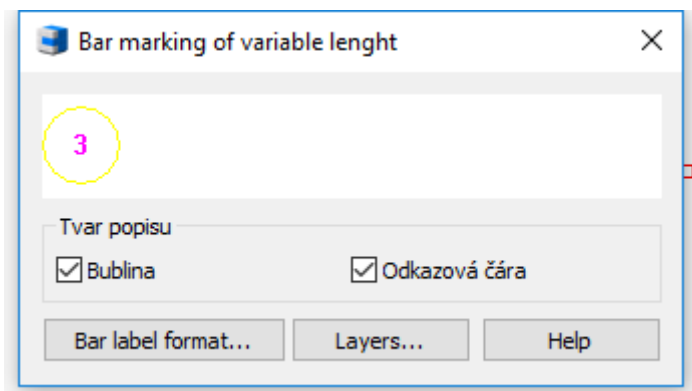


Fig. Setting the looks of bar labels of a variable length item.

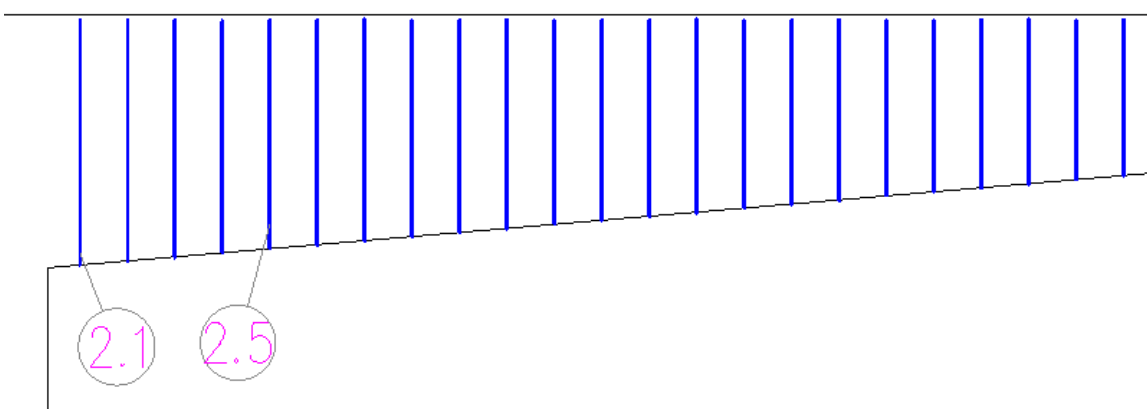


Fig. An example of bar labels of a variable length item.

Individual bar bending details – option to set number from elements

The tool for inserting the bar bending details individually now offers the possibility to select elements from which the number of bars will be counted.

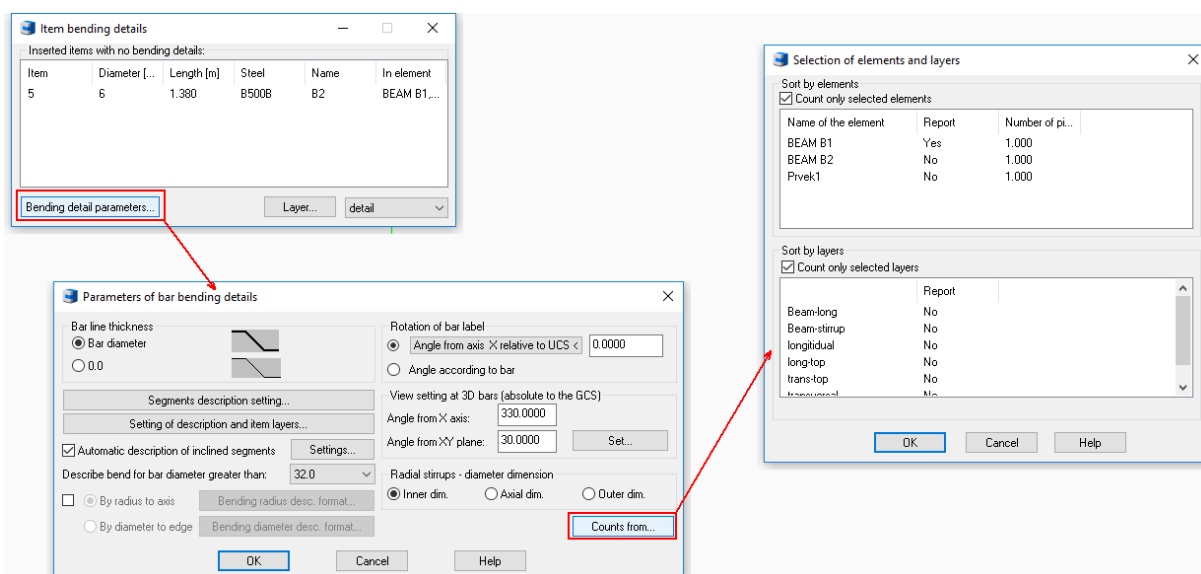


Fig. New possibility to determine total quantity of bars.

AbRcBarVisibilityOn

A new „hidden“ command AbRcBarVisibilityOn makes the bars in 3D formwork model visible.

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

Drawing

- Objects cannot be trimmed / extended to locked layers
- Command „_LEADER“ failing at high coordinates
- When using the „P“ parameter within a selection, objects in locked layers are also incorrectly selected
- Some segments within command „Trace“ („_TRACE“) have incorrect width
- In the user coordinate system, blocks are inserted relative to the global coordinate system.
- Programme failure when working with specific 2D polylines
- „Fillet“ and „Chamfer“ commands failure when selecting specific polylines
- Non-functional perpendicular and quadrant SNAP on circle objects
- Non-functional intersection SNAP in case of stacked multiple objects
- Non-functional SNAP on 3D faces in blocks
- Auxiliary lines within the command „From point“ are not displayed when OTRACK is turned off

Contents Explorer

- Programme failure when using button „Insert external file“ when inserting a new block
- Non-functional option to attach raster pictures and DNG files using „Reference Manager“

Reference

- State (size and position) of the dialog window for managing External reference is not saved
- Random programme failure when attaching any image to the drawing
- Non-functional „Invert clipping“ option in the „_PDFCLIP“ command
- Command „Synchronize attributes“ does not retain current attribute values and does not update changed attribute properties after synchronization
- Non-functional notification about a change of the reference file (variable „XREFNOTIFY“).
- Incorrect display of underlying PDF contents when using more than 4GB RAM.

Layouts, viewports and rendering

- „Teigha Initialization error“ when trying to invoke plotting style table manager using PStyleApp.exe
- State (settings) of advanced print settings is not saved
- „Previous plotting“ option saves the printing area incorrectly
- Incorrect rendering of TIFF images with an indexed colour palette
- Incorrect rendering of OLE objects originating in Office 2007
- Incorrect rendering of OLE objects embedded inside blocks
- Incorrect rendering of some JPG picture file compressions
- Random programme failure when deleting the last layout
- Failure when saving an older type of printer configuration (PCP file).

3D tools

- Non-functional SNAP on some types of 3D solids

- Non-functional SNAP on some types of 3D faces
- Incorrect conversion of some object types to very high coordinates using command „_FLATTEN“
- „_FLATTEN“ command failure when used on 3D faces

Hatches

- Failure when taking the hatch properties from a custom hatch type
- Failure detecting specific areas
- Non-functional CTRL key for scrolling through grip options
- Transparency of a created hatch is always 10
- Non-functional „Recreate boundary“ option within „_HATCHEDIT“ command
- Non-functional „Associate“ option within „_HATCHEDIT“ command
- Option „Independent hatches“ within „_HATCHEDIT“ command changes colour of some hatches
- When using „Create boundary“, the boundary is always created into layer zero
- Programme failure while manipulating (moving, copying, rotating etc.) hatches if fully associative dimensions are drawn to their boundaries

Dialog window Properties (CTRL+1)

- Non-functional tolerance editing in the Properties dialog
- Incorrect sorting of viewport scale list
- Non-functional hiding of the dialog
- Non-functional option to change the extension line and dimension linetype
- Basic properties (colour, linetype etc.) cannot be changed for a polygonal viewport

Group

- Failure of „Remove objects from a group“ option
- Non-functional „Highlight objects in the group“ option

Mtext, Dtext

- When exiting the command using Esc key, the zoom of the drawing will return to its previous state
- When loading the drawing, the last dynamic text fields value saved from AutoCAD does not display

Blocks and attributes

- Justification options are not functional for a multiline attribute
- When creating a block with attributes, the current coordinate system is not respected when the attribute height and rotation are entered directly
- Selected objects for block definition will stay highlighted even after the block is created and command is terminated

Working environment

- Layer/ colour/ linetype/ lineweight drop-down selections failure when placed in the quick access panel
- Icons of some command groups placed in the quick access panel are not displayed
- Random programme failure when attempting to place some commands to the quick access panel

- The Toolbar environment is not adapted to the Windows DPI font size

Other

- „Object of class *AcDbProxyObject* can't be cast to *AcDbAssocAction*“ error when using basic functions in a specific drawing containing AEC objects.
- Incorrect AutoCAD Multileader editing – the position of the leader is changed after the editing
- Non-functional help when clicking on the question mark in the command whisperer
- Object flickering when the selection preview is activated (variable „SELECTIONPREVIEW“).
- The programme does not remember the last path to save the file
- Tooltip does not display the correct value for variables in the command line
- The line preview is not displayed in the linetype drop-down selection if the layer is turned off or frozen
- Non-functional „Undo“ option when editing objects using grip points
- „Undo“ command („_UNDO“) goes back only a limited number of steps depending on the number of objects
- Using the multifunctional polyline grip points, the polyline vertices are extended in the opposite direction if the object was mirrored or its Z-axis normal was reversed
- Poor text quality within the Publish command
- Some pages in CADKON+ Basic help are in English

Problems solved in CADKON+ ARCHITECTURE

Bubbles

- Automatic synchronization reports different items of the same label but different data in cases, when two or more bubbles of the same label have a different floor parameter
- An error message appears when attempting to renumber bubbles with mask „none“

Tables

- Tables are not plotted into the drawing according to the set user coordinate system but always according to the global coordinate system
- When using function Subtracting window/door scheme (`_CK_SCHEME_CREATE`) on an opening with incorrectly entered height dimensions (i.e. not corresponding to the current units), the scheme is incorrectly rendered
- Multiline text with two and more lines in custom tables is incorrectly evaluated

Staircase

- If a 180° composite staircase is created, the staircase preview is incorrectly displayed
- Tree flight staircase will, in specific cases, render a landing
- Function Delete staircase does not delete a staircase section line
- Incorrect drawing of the staircase edge with a message „Section 1: boundary not found“ at specific staircase setting

Openings

- Non-functional option to draw a ledge on the „Opening“ tab within the openings with window drawing

Other

- Incorrectly set description colour when the text is Mtext. The description does not respect the colour of the layer in which the text is inserted
- Random programme failure when using function Vents dialog

Problems solved in CADKON+ RC

Bar row description

- The option to select and describe 2 rows in alignment at the same time was brought back
- When copying bars/ rows of bars, their description is displayed immediately after the copying is finished
- When extending bars, the row description dimension now remains in its original position

Item in lm

- Extending or trimming bars in a copied row of bars in lm is now working correctly

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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