



ELITECAD AR14.1

Information about the new version

www.elitecad.eu

Highlights of the new version

December 2018

“Usability first” – that was the premise the team of ELITECAD set for ELITECAD Architecture 14.1, because for us, the user always needs to be in the focus. Of course, numerous new functions were developed as well, but the main focus was set on optimizing the many steps of your daily work, making workflows more efficient, unifying the user interface and combining similar functions.

Easy workflows and efficient processes have always been some of the most prevailing advantages of ELITECAD. Nevertheless, it is possible to make easy things even more intuitive and effective workflows even more efficient. We aim at making complex functions simple to use and at the same time optimally integrating the countless possibilities available in the tools of ELITECAD.

In the following overview, you will find a summary of the adaptations and extensions in the new version, because in the end the big picture, and the generated increase in usability, count more than the small details. For instance, when we implemented the possibility to select project templates in the welcome screen, a new function to configure and create project copies and project variations was developed. These are only two of the countless new functions that automate complex processes, which not only makes daily work faster, but also eliminates potential errors.

Building Information Modelling as a central topic in the planning field was another main focus of the new version. Even though BIM in ELITECAD already stands for **B**eneficial – **I**ntuitive – **M**anageable, we still strive for an even better integration of the process into our products. As a long-standing member of buildingSMART, XEOMETRIC is setting a high focus on continually improving and developing the IFC interface for consistent data exchange. On the one hand, the substantial extensions of the interface drastically improve the extent of information, and on the other hand allow us to handle IFC files with lower qualities much better.

The team of ELITECAD would like to wish you a lot of joy getting to know the new version, as well as lot of success using it regularly with your projects.



Dr. Wolfgang Stöger
CEO

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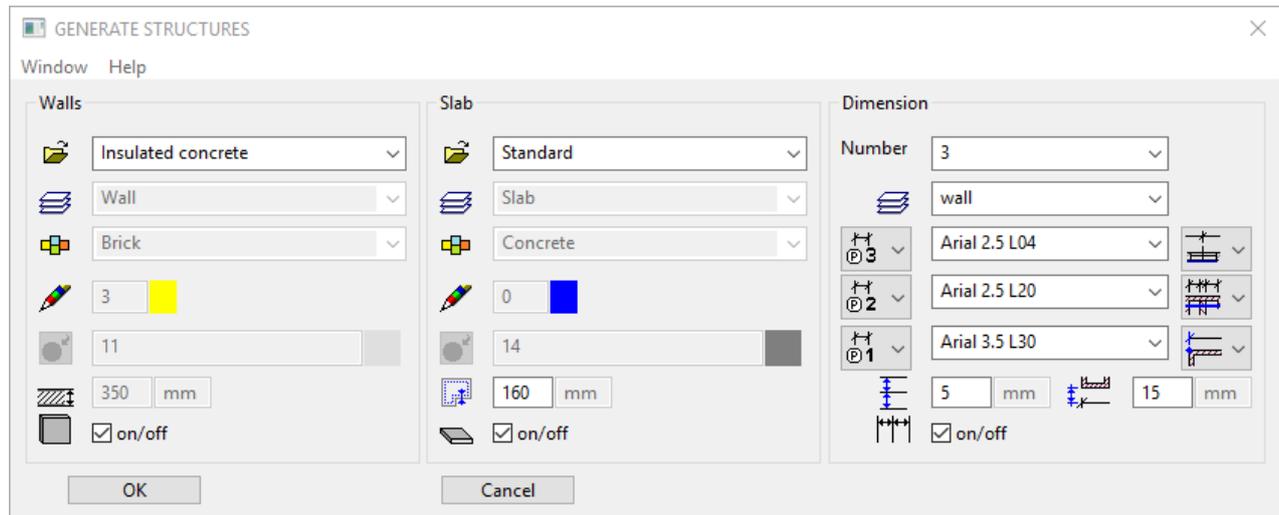
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Usability and extensions

Generate structures

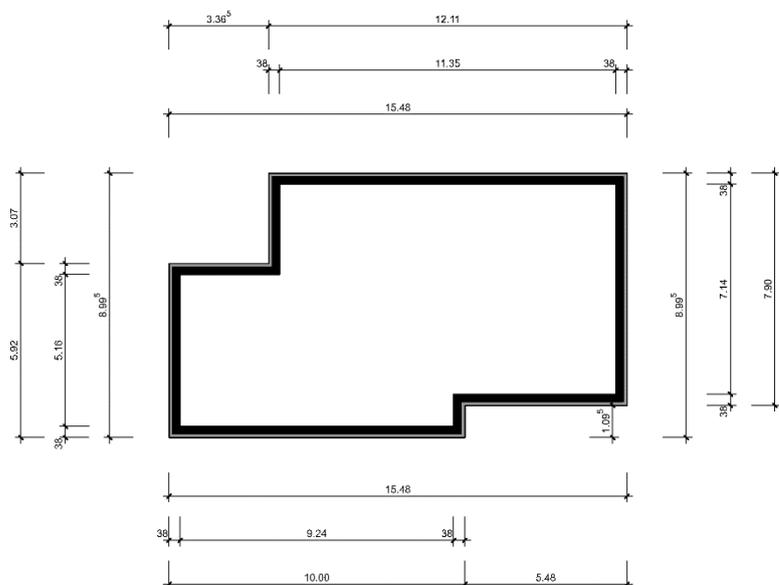
More presets



The quick generation of a structure from a contour is one of the major strengths of ELITECAD. Even this function received further optimization. Now it is possible to configure the parameter sets for walls/slabs in the GENERATE STRUCTURE dialog, which allows selecting multi-layered objects. This enables you to generate structures with complex settings even faster.

Automatic dimensioning

In addition to the geometry it is now possible to create automatic dimensioning with the function GENERATE STRUCTURE. The dimensioning can be configured freely in the GENERATE STRUCTURE dialog and is depicted in all storeys. From a contour to a dimensioned structure with one click – creating a dimensioned BIM model has never been so easy and efficient.

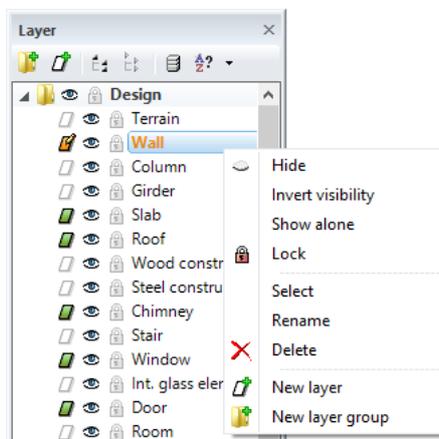


Layer

Change of current layer when editing objects

When editing existing objects up until now, the according layer was activated upon selection of an object. In some cases, it makes sense to maintain the current layer when editing an object. This behaviour can now be activated and deactivated optionally. The new setting is called "change current layer when editing" and is available in the context menu of the layer manager. It supports both workflows.

Actions for the current layer

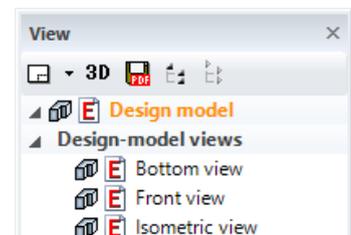


The current layer is always visible and editable and therefore can never be locked or deleted. In order to hide, lock or delete the current layer, it was necessary to select a different layer before executing the desired action. Now this step is done automatically. If there is at least one other visible and non-locked layer, one of the eligible layers is activated automatically and the workflow is reduced by several clicks.

Views

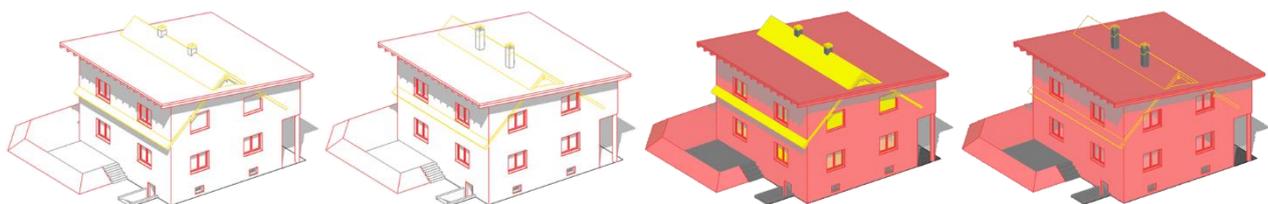
Open/close of all groups in the views manager

A function, which is already well established for the layer management, was now also adopted for the views management. Now it is possible to open or close all groups in the tree view of the view management with a single click, which eliminates the time consuming selection of single groups.



Depiction of demolition objects in renovation planning

The depiction of the demolition objects in the views and sections can now be configured via the view parameters. In the new version, the demolition objects can optionally be depicted as solid objects or in wireframe mode. That way they are 100% transparent and have no effect on the visibility of the shadow depiction.



Project management

New project

The optimization of the function NEW PROJECT leads to a new project with only a few steps and is now much easier to use. Instead of opening a new window for entering the project name, the fields of the project dialog are emptied and the new project data can be entered immediately. Just confirm with OK and you are ready to start.

Project variations

A special improvement in usability was provided by implementing a new function to generate project variations. Until now, creating a copy of an existing project was a complex process. Special knowledge about the background processes was needed to combine the information associated with the drawing and database information manually into a project copy. This additional effort is now a thing of the past.

The new function „COPY PROJECT“ in the project dialog creates a duplicate of the selected project with a single click and performs all necessary steps automatically. As a result, the process of creating a copy became much faster and more comfortable. In addition, the integrity of the copied project can be guaranteed.

In addition, when copying a project, the user can select which drawings should be copied from the existing project, which creates additional flexibility.



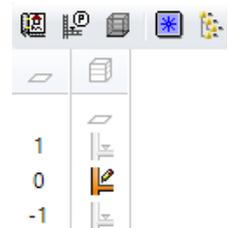
Project templates

Project templates are now available in the welcome screen (see description below) and work similar to the new function of project copies. Prepared projects, as well as custom made templates can be copied with only a few clicks, and you can easily create a new variation.

Structures and storeys

Show all storeys

When working with structures and storeys, sometimes it is necessary to make everything visible. To avoid having to do this manually for every storey, the new function “Show all storeys” can perform this task for you, now available as a new button in the storey manager.



UNDO for storey manager

In addition to setting the current storey, the storey manager now features more possibilities to undo and redo actions. Showing, hiding, locking and showing a single storey or structure can now be undone and redone which avoids having to restore the original state manually.

Working with separated storeys

For working in a team, or working on large projects, it is possible to enable storing storeys into separate files. Especially for collaborating in a team, it is important to avoid having conflicts and clashes when implementing changes to a model. Now it is impossible to overwrite a storey accidentally, which was loaded as a reference. What was initially intended as a help mechanism, namely later on switching the state of a referenced storey to be able to apply and save changes, turned out to be potential source for errors. In order to avoid any risks, the new version prevents saving protected storeys under any circumstances. Desired changes have to be stored separately and can be applied manually in the editable mode after loading the affected storey. This workflow is known from office applications and leads to more security when working in a team environment.



Separate storeys with internal references

The combination of internal references and storing the building in separate storeys creates more freedom in the planning process. This possibility was introduced in the new version.

The application includes extensions in two positions. On the one hand, internal references are stored with separated storeys, so they are available when opening storeys as separate drawings. Internal references may still be modified in the central model file, so that deviations in the data are avoided. On the other hand, when loading storeys into the central drawing file, the internal references are validated and if necessary updated with the latest version.

Welcome screen

Easy start with project templates

The welcome screen was extended by a new tab for project templates. These project templates are intended to make getting started with ELITECAD even easier. When selecting a template, a copy of the project template is generated, so that the user can start working on the project right away. The template itself is never actually changed.

The path for project templates can be set in the ELITECAD configuration and can even be located on a central server, so it can be accessed by the entire team. The tab "Project templates" is visible in the welcome screen provided it is enabled in the ELITECAD configuration and templates are available.

New project

Creating a new project was integrated into the welcome screen as well. With a simple click, the project dialog opens and a new project can be started.

Graphical preview

The preview of the recently used drawings and the new project templates are not only displayed in lists anymore, but also feature a graphical preview. Furthermore, the list in the welcome screen can now be emptied.

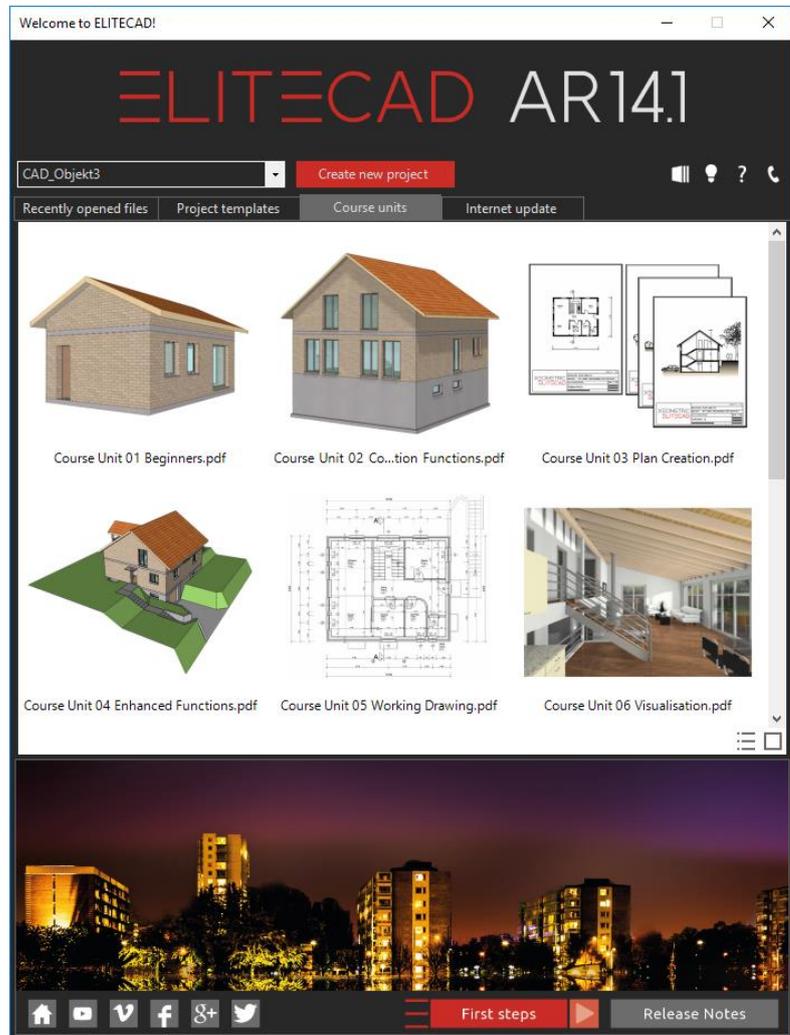
Recently opened files

Recently opened files are only showed, when the according files still actually exist in the corresponding folder.

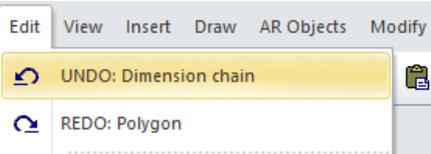
User interface

Display of shortcuts in menus and tooltips

Shortcuts are key combinations for the quick execution of functions. They enable substantial time savings and best stay in memory by frequent repetition. In order to use this potential even better, the new version displays these shortcuts on countless other locations in the menus and tooltips. That way, learning and memorizing the shortcuts is even faster more intuitive during daily work with ELITECAD.



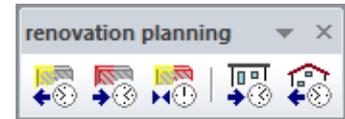
Display UNDO steps



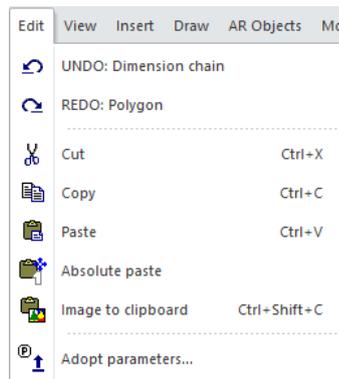
Which action is undone when clicking on the UNDO button? The new tooltip of the undo function has the answer. In addition, the current UNDO step is displayed in the menu under EDIT -> UNDO and EDIT -> REDO.

Toolbar renovation planning

The new renovation planning toolbar is now included in the toolbars and automatically loaded in ELITECAD Architecture 14.1.



Icons in menus



For the new version, we added icons for all important functions in order to improve recognition of the functions if they are executed from the menu or the toolbars.

Non-breaking space

Using the function „Insert symbols“, it is possible to accept the non-breaking space in the text input field via the context menu.

Drawing

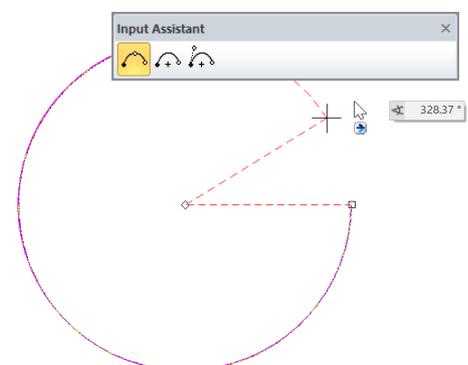
New help line



There are new possibilities to draw a helpline through a point and an angle relative to an existing line. In the property bar, you can specify whether the angle of the help line is entered in absolute or relative coordinates.

New arc function

The arc function using start point / point on arc / end point was adjusted to work like the general drawing functions for polygons and now enables drawing of arcs via radius / start point / end point or start point / tangent / end point. Unified user guidance for the input help functions (display using the TAB key) further eases the drawing of arcs in several locations.



Display the reference points

For some objects, the direction of drawing is relevant. A single line for instance, has a start and an end point. If the length is changed by adjusting the value in the property bar and not in the graphics window, the start point (reference point) is fixed and the end point changes.

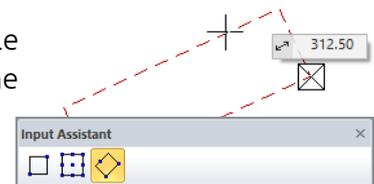
In order to distinguish these reference points in the graphics window from other points, similar to architecture objects, 2D objects now also feature a handle for the reference point in the shape of a filled rectangle

Move reference point

The function for moving reference points was unified for all objects. The unified function further improves recognition of the function.

New rectangle function

The new possibility for drawing rectangles allows defining a rectangle by providing two points as well as one point on the opposite side. The main advantage of this function is that rotated rectangles can be defined without providing an angle.



Create objects from parallel contour

Countless objects can be defined with contours that are either selected as an existing contour or created when generating the object. Using a parallel contour of an existing contour as input was not possible in either method up until now. In the new version, it is possible to select the newly generated parallel contour for the new object right away using the variant "Create objects from parallel contour". As a result, parallel contours do not have to be drawn in advance.

Deleting

Back / backspace

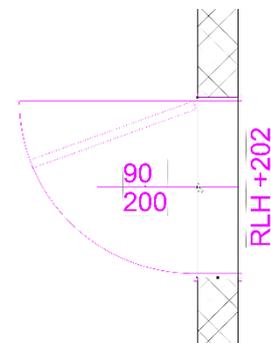
Now BACK / BACKSPACE keys can be used for deleting a selection. Deleting via the keyboard works in the same way as using the CTRL or DEL keys.

Manipulating

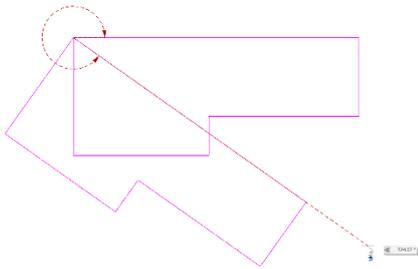
New handles for objects

The easy manipulation of objects is one of the key strengths of ELITECAD. Additional centred handles were added to wall openings, doors, windows and glass elements, so these architectural objects can be aligned in the centre more easily.

In addition, the 2D rectangle now features a new handle in the centre. The rectangle centre point is also available for rectangular architectural objects like columns or slab openings.



Rotating with point input



For the rotation of a selection, it is necessary to provide a rotation point and an angle. The function for interactive angle input using the initial direction and end direction of the desired straight can now be activated and deactivated.

The available rotation functions are now also provided via the input assistant.

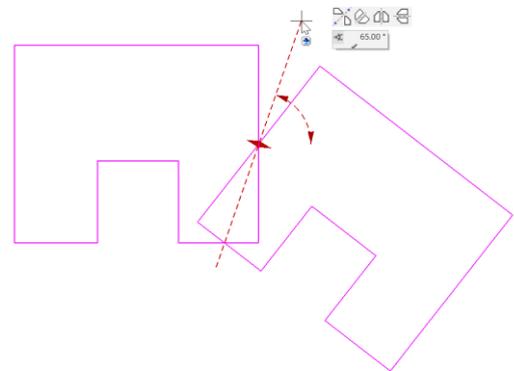
The graphical preview of the inputs for the points and angles makes the application of the function even more intuitive.

Mirroring with point input

Mirroring a selection in 2D requires a mirror axis. The function for interactive input of a mirror axis through two points can now be activated and deactivated.

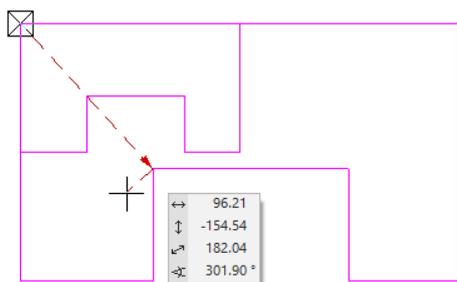
The available mirroring functions are now also provided in the input assistant during mirroring.

The new graphical preview of the mirror axis and the mirrored result make the application of this function even more user friendly.



Scaling with point input

Expanding and reducing via a scaling factor is very intuitive in theory when working with integers (double, half, etc.), but if a desired size has to be reached, it is necessary to first measure the distances and then calculate the scaling factor. The new graphical scaling with point input makes this process much easier. Simply select a start point that will be scaled to a target point. The resulting scaling factor is calculated automatically by the software. In addition, the result is shown interactively in a graphical preview, so scaling can be done as easy as never before.



Graphical preview

Visual feedback during the execution of functions is the best support during drawing, measuring and all other graphical activities and actions. The improved highlighting of point input, the preview of results during functions, as well as the graphical display of measurements (e.g. angles) are only some of the examples, where previews were added or extended to make working with ELITECAD even more convenient.

Copy with CTRL-key

In many situations, pressing the CTRL key will result in copying the current selection during a manipulation. This possibility was extended for even more cases, and now allows the generation of copies, independent of the previously activated copy function (e.g. during rotation, mirroring or scaling).

Displaying handles

The possibility for switching between the various handles of an object (only 2D / only 3D / 2D and 3D) using the TAB key was adapted to work not only for 3D objects but also for some architectural objects (e.g. columns). This unlocks easier manipulation possibilities for complex objects with many handles.

Graphical preview of glass elements

When moving glass elements, the object is now depicted as a bounding box in the preview. That way the new position can be seen right away.

Parameters

Copy layer

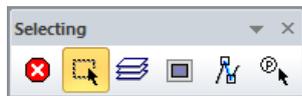
Precisely speaking, layers are not really part of the object parameters, but with the new function COPY PARAMETERS, it is possible to copy the layer information from one object to another. The possibility to copy the layer was also added for texts, hatches, dimensions, 2D elements as well as 3D objects. This makes working with ELITECAD even more efficient.

Copy parameters

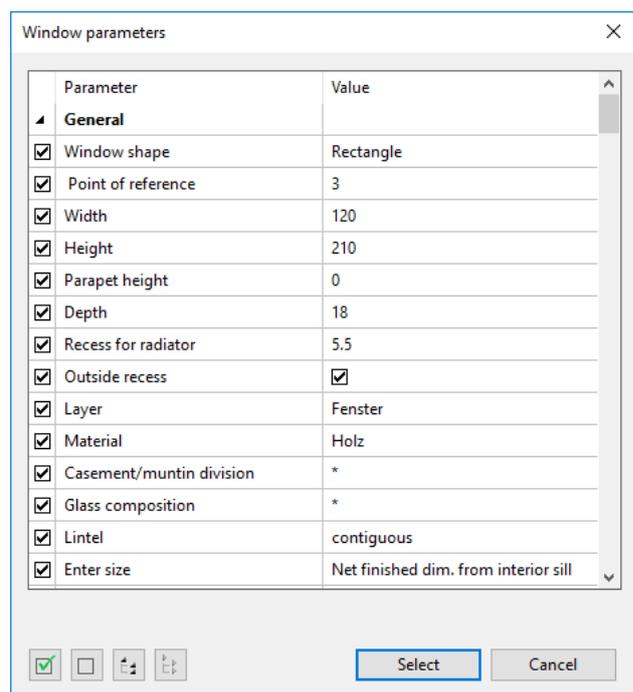
Similar to the views and layer management, the dialog COPY PARAMETERS now also features a switch for all groups OPEN/CLOSE. Now all groups in the tree view can be opened or closed with one click. This saves precious working time, because manually selecting groups can be avoided.

Selection

Selection via parameters



A completely new and very flexible way to perform a selection is the new selection function SELECT PARAMETER. Starting with the desired object, similar to the copying of parameters, various criteria can be selected in a dialog, which are then used to select all objects that match these criteria. That allows you to for instance select all windows with a certain width, or all texts with a certain colour, and then perform a certain action with the selection. The possibilities are unlimited, and the attribute names are irrelevant, because the available parameters are displayed nicely in the selection window.



Hatch

Unification of hatch and covering hatch



Up until now, the covering hatch was an independent function, where you had to draw a polygon, which was then defined as the covering area. By merging the generation function for hatches and the covering hatch, now there is almost no difference between the two variations. That way, the covering hatch can also use an already existing contour or determine one with the contour search. Both variations now use the same property bar for setting the options, the type of input and the type of hatch.

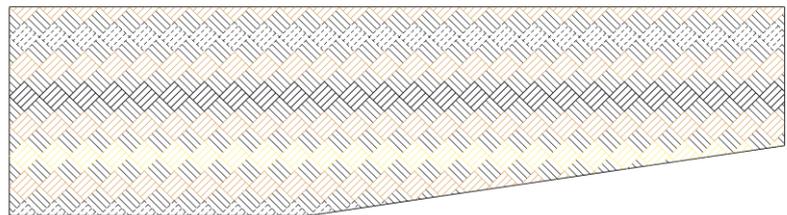
Interactive alignment of hatches

Line and model hatches are also used to depict pavements and tiles. In these situations, it is sometimes necessary to adapt the alignment of the hatch in the drawing to the geometry. Until now, this adaptation of the alignment was only possible in the hatch parameters, which happened without any graphical reference to the drawing.

The interactive alignment of hatches now allows moving the hatch in the drawing. Selecting the elements and points of the hatch is as easy as manipulating the geometry. Using handles, the hatch elements can be moved within the hatch contour and aligned precisely in the drawing.

Multi-coloured hatch

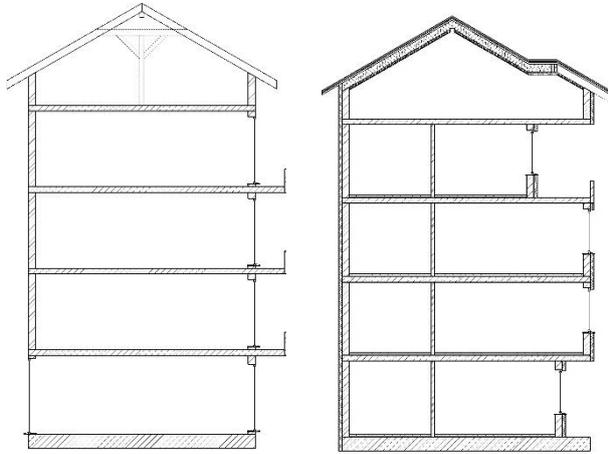
The model hatch uses predefined or customly created 2D contours, to stitch them together in a repetitive way to create a hatch. Until now, the model hatch was drawn with the colour selected in



the hatch parameters, ignoring whether the hatch definition used different colours. With the new version, the colours are preserved if more than one colour was used. Otherwise, the model hatch still uses the predefined colour from the parameters.

Bearing / non-bearing components

Depiction in views



The visibility of bearing objects (core) and non-bearing objects is individually configurable in the view parameters for floor plans, views and sections. That way plans with different depiction can easily be generated from a single model.

Dimensioning

Dimensioning for bearing objects (core) and non-bearing objects can be specifically activated in the dimension parameters or the property bar. This option leads to a high level of flexibility and eliminates the need for

manual input of the dimensioning points.

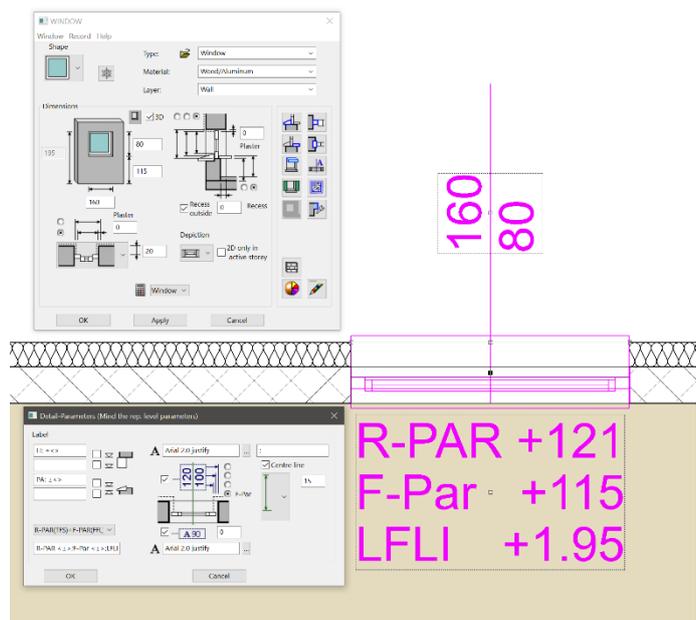
Windows

Labelling

Labelling of windows in a scale of 1:50 was extended by another variation. The new labelling type corresponds to the depiction set by ÖNORM.

Blind cases

The height of the lower edge can now be defined similar to the door leaf.



Truss

Rotated balusters

The rotation of balusters in the truss can now be optionally configured in the object parameters. This provides more possibilities for balusters that do not have a quadratic section, so that the rotation of the baluster can be adapted relative to the collar.

Variable height of balusters

The upper and lower edge of balusters can now be manipulated after creation as well.

Braces with position information

The location of the head band relative to the baluster now features more variations. For instance rotated by 90 degrees, left or right, both sides or all sides – ELITECAD users enjoy total freedom.



Banister

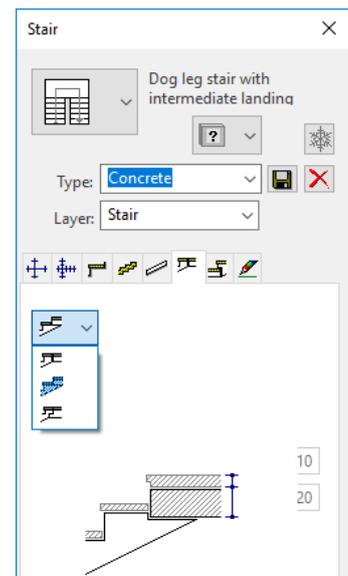
Banister creation

A small restriction for a rare case was removed: banisters can now be generated from closed contours.

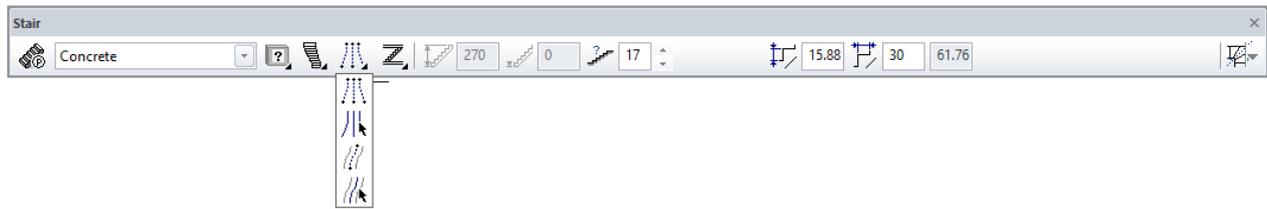
Stairs

Stair heads for additional stair types

Parameters of stair head and stair foot of the quarter turn staircase, full dogleg winding staircase, dogleg winding stair case and free stairs can now be edited freely. The variations and options are identical to the straight stair types and therefore open a lot of possibilities for the definition of stairs.



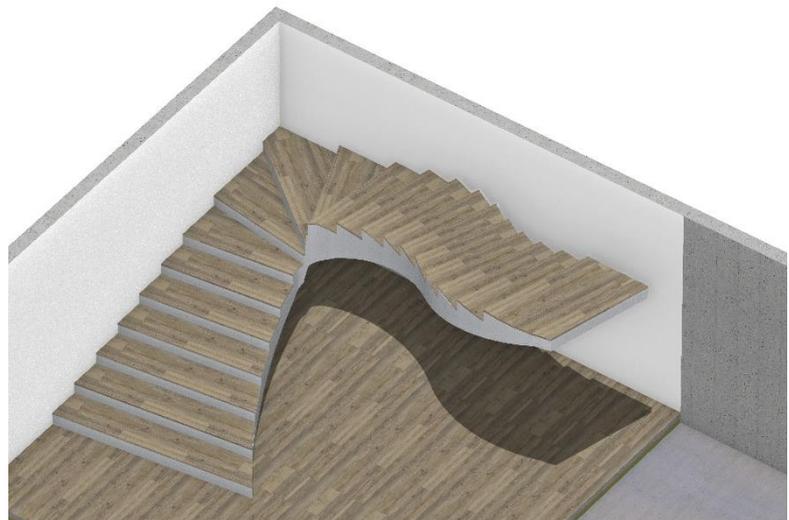
New input possibilities for free stairs



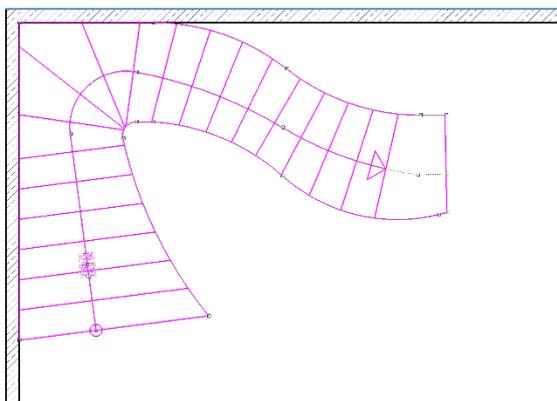
The generation of free stairs is now much more flexible than before. The pitch line, as well as the side contours can be constructed freely or selected via existing contours. Alternatively, it is also possible to generate free stairs only using the pitch line. The side contours are created automatically with a configurable distance.

Conversion of turned stairs into free stairs

Using a switch in the property bar, winding staircases can be converted into free stairs. This allows you to combine the quick generation of parametric stairs with the extensive degrees of freedom of the free stairs.



Editing contours of free stairs



Until now, free stairs were quite restricted regarding the possibilities for changes. With the new version, the pitch line and side contours are freely configurable. Using handles and grippers for the contours, you have all the necessary tools for efficiently performing adaptations.

Slab

Labelling of slab openings

Analogous to the wall opening, the labelling of slab and ceiling openings were extended by the text "usage".

Wall opening

Alignment with door

The parameter dialog for wall openings was revised and unified with the parameter dialog for the door. Now two similar objects can be handled in the same way, which makes workflows easier to understand.

Stops in wall opening

When adapting the door parameters, we also adapted the wall openings for the possibility to define stops analogous to the door.

This extension is not only a unification, but also provides the possibility to integrate library parts of door and window manufacturers, using the same flexible options for defining stops like for doors and windows.

Doors

Pointed arch doors

Some door variants have special parameters, which only exist in the corresponding type. When switching between types, default values have to be assumed. The new version was extended by numerous meaningful default values like vault height when switching to pointed arch doors. In addition, validations for meaningful input data was improved.

New door jamb types: on wall frame and free frame



Two new variants were added to the available jamb types. On wall frames can be defined easily with their dimensions.

If you want total freedom, you can use the free frame, which allows you to define a contour freely.



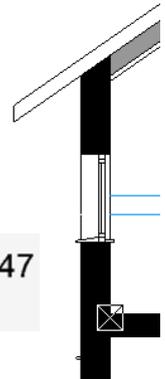
Jambs with door stops

All jambs now feature the possibility to provide a door stop. With two dimensions, you can define width and depth, and as a result, you receive a depiction in 2D as well as 3D.

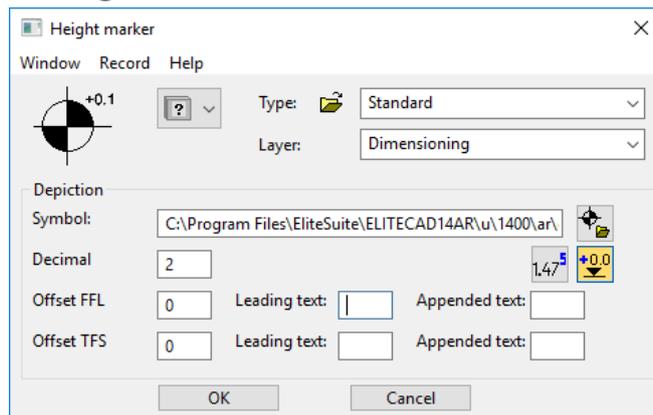
Height marker

Display of absolute values

In addition to height indications relative to the project settings, you can now also display the absolute height in the height markers. A new autotext *height (absolute)* is provided for defining the height marker template. There is no plus sign used for absolute heights.



Plus sign



The height marker can be optionally extended by a leading plus sign. The plus sign can now be selected in the parameter dialog as well as the property bar.

3D objects

3D parameter dialog before creating new 3D objects

When creating new objects, you can open the parameter dialog of the corresponding object using the property bar. For reasons of unification, the 3D parameter window is now already available before actually creating the object in order to enable presets of the layer etc. That way another detail regarding user guidance was unified.

ELITECAD configuration

Launch from ELITECAD

The ELITECAD configuration is not only available from the start menu anymore, but can now also be launched from the ELITECAD user interface via the menu settings.

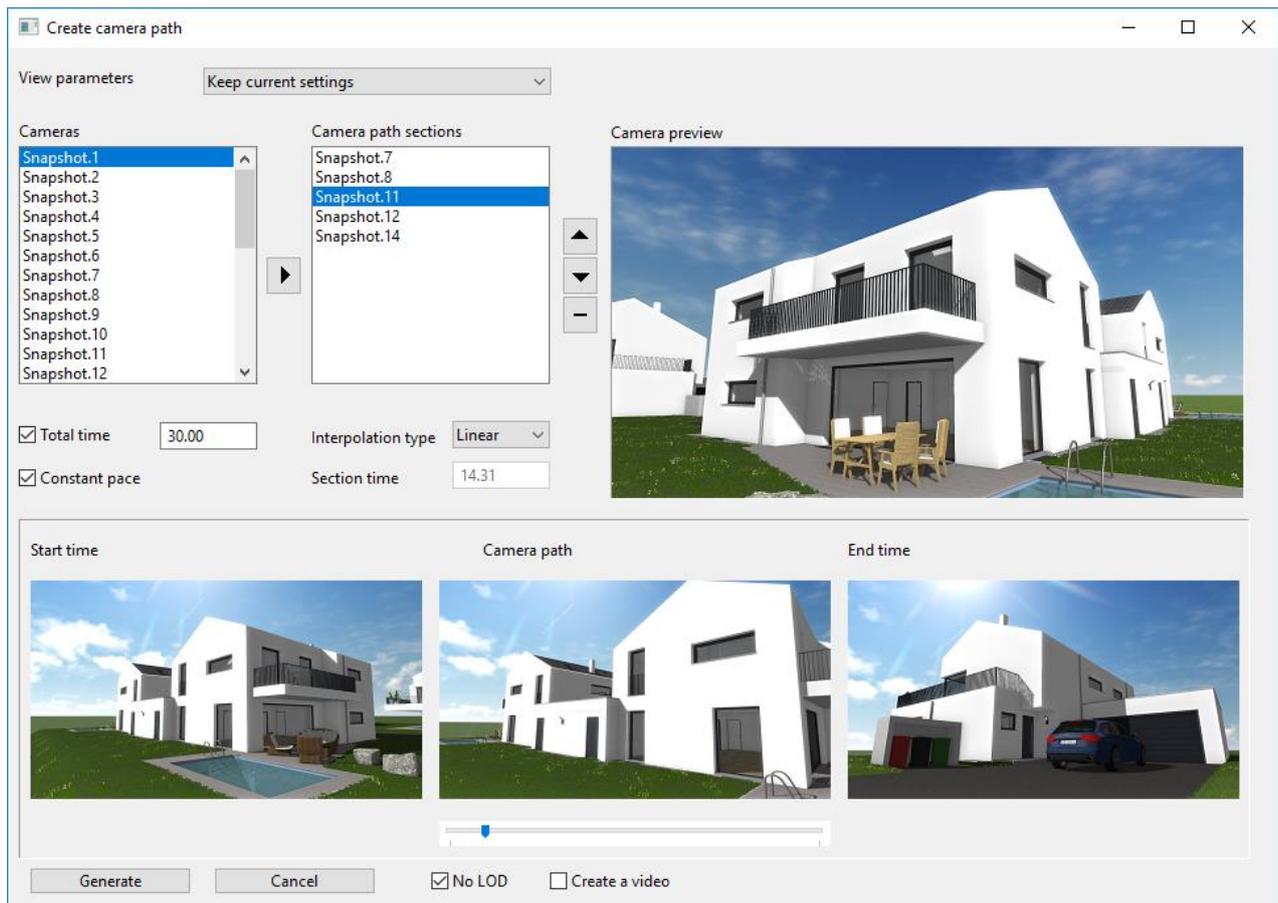
Path for project templates

The new project templates can be stored in a shared directory, so your whole team can access them. This path can now be configured in the ELITECAD configuration.

Camera

Definition of camera paths

Camera paths are the foundation for creating videos. Until now, it was only possible to create camera paths by recording the movements in virtual walkthroughs. The new version offers a completely new approach to this by defining camera paths through saved camera positions. The camera movement between the positions is interpolated and the time between points or the total duration can be set by the user. With only a few clicks, it is possible to create a sequence out of snapshots intuitively, which then turns into a configurable camera path. This practical and easy way of defining a camera path is the basis for a smooth video with steady camera movements.



Save

New function: Save drawing for transfer

As a one-file-system, ELITECAD stores the entire project state. Nonetheless, in some cases files may be stored outside of the file, like materials in a centralized database, external references, external background images, large bitmaps, etc. When transferring an ELITECAD file to someone outside of your working environment, it might happen that information is missing if it is not specifically transferred.

To avoid this scenario, we developed a new function called „save drawing for transfer“, which saves all external data into one ELITECAD file, independent of the current settings in the options. That way the integrity and completeness of the data is guaranteed and problems can be avoided.

Languages

Russian

Many functions and dialogs in the user interface have been adapted to better support Cyrillic symbols. The Russian translation has been completed and ELITECAD is now available in a Russian version.

Performance

Improvements

ELITECAD is state-of-the-art tool for architectural masterpieces; therefore, we looked for many ways to improve performance. The many improvements in the rendering process result in a speed-up of 30-50% depending on the model. Adaptations of the CAD kernel, for instance more efficient processing of internal data structures, also have an effect on countless functions, like working with very complex hatchings.

Real-time-visualisation – Virtual Reality

Support of additional VR devices (HTC Vive, Windows Mixed Reality ...)



ELITECAD now includes the native integration of **SteamVR**. SteamVR, also called OpenVR, is a platform-independent runtime library for supporting countless VR devices like the Oculus Rift, HTC-Vive and Windows Mixed Reality. Furthermore, it unlocks many new features including the use and operation of various VR hand controllers.

Now ELITECAD better supports the **VR Room-Scale Setup**, so that VR users can physically move around more efficiently. After completing the setup, virtual borders are depicted with the VR, so

that real world collisions with objects can be avoided.

In order to be able to use SteamVR, it is necessary to create a Steam user profile. Furthermore, the runtime library has to be installed separately so it can be enabled in the input device dialog.

VR-Hand-Controller (Touch)

In addition to the well-known gamepads like PS4, XBOX, etc., now VR hand controllers like Oculus (Touch) and HTC, as well as all Windows Mixed Reality devices including controllers are supported as well. Depending on the device type, touch areas, joysticks and buttons are available for intuitive interaction.



Improved depiction of the round VR menu

The option “menu relative to VR controller” shows the corresponding VR menu relative to the hand controller, on which the menu was opened. If this option is deactivated, or if no VR controllers are active, the round menu is displayed in the viewing direction as usual. The new feature is that the VR menu is not static anymore, but instead follows the head of the user. That way, the open menu can never get out of sight if movements in the real world occur.

Interaction pointers

The interaction pointers of the VR hand controllers provide a native and playful way to perform interactions and selections. Using coloured rays for depiction, it is immediately clear what is selected and interaction is as easy as never before. Thanks to the option “show hair cross”, the user can switch between the well-known VR hair cross, which is located at the centre of the view, and the interaction pointers.



VR status notifications

It is now possible to show important notifications directly in the VR mode via VR status notifications.

Direct call of VR functions

New functions for the walkthrough mode were added, which especially benefit the VR scenarios. They can be configured analogous to the other functions in the VR menu as well as on VR controllers and gamepads. These specialised interaction functions can be used directly without additional user input (direct library part exchange, material change, selection or display of object information).

Pausing audio output

The new option for activating/deactivating audio output can be controlled via the VR menu.

Teleport

The teleporting function was adapted to VR best practises and now works more direct and intuitively using direct flights without additional rotations. The function can be used to combine virtual walkthroughs with physically moving in the real world (room scaling). That way the user has three different ways to move around in VR, depending on the situation.

VR flashlight

Flashlights can be enabled for the left and right hand controllers. The light bulb on the left side is soft, wide and less intense light. On the right side, a more focused, stronger and colder light is available.



These options are practical if there are no light sources in the model, but you want to experience the effects of the real-time-visualisation, for instance in interior rooms with dim lighting. Flashlights are dynamically generated as light sources (spots) and can be configured like any other light source.

Improved image quality in shader mode

The image quality in render mode was improved dramatically. New technologies and optimizations enhance the quality in the normal graphics output as well as in VR devices. The newly integrated Fast Approximate Anti-Aliasing (FXAA) improves edge-smoothing as well as trilinear texture filtering and reduces the transitions of mip mapping steps. Furthermore, the depiction of soft shadows, ambient occlusion (SSAO) and adaptive transparency were improved which has a drastic effect on the visual results.

Beside improvements in quality, the new version also includes several adaptations that increase the frame rate, so models can be experienced much more smoothly. Especially in VR environments and in the walkthrough mode, this high frame rate is important because it leads to more comfort and better immersion.

Quantities

On wall frame

The quantities of doors were extended for the frame type “on wall frame”.

Docutexts

Now it is possible to configure individually whether the docutext of the quantities is depicted in the 2D view for each type of architectural object. Independent of this, the lists in the quantities manager provide all available docutexts.

Openings

All architectural opening objects (wall-, slab-, ceiling- and roof-openings) are evaluated and displayed in the quantities manager. In addition, openings of windows and doors are hierarchically associated with the according doors and windows.

Walls

The quantities of free walls and contour-walls were extended with the calculation of the ground area as well as the maximum height.

Exterior space

Objects like ceiling covering, ceiling upper layer, etc. are now featured in the quantities of the exterior space as well.

Base data

It is possible to reset the base data of the quantities to the initial default state in the configuration dialog. If multiple users access the same database, then resetting the values is only allowed for the user with the latest version of ELITECAD.

Using the option “subtraction checks (openings)”, it is possible to control the application of the rule of disregarding openings.

The performance of reading the base data (e.g. material substitutions) from the database was improved dramatically.

Reports

Until now, free objects, that were missing too much data, were not always listed. For slabs with multiple subsequent similar layers, sometimes not all layers were listed. This was improved in the new version.



The area verification with reduced depiction does not include single surfaces anymore and was adjusted to portrait format.

Column widths and alignment of headers were optimized.

The possibility to control page breaks was extended: e.g. in templates it is possible to define, that within a block, breaks only occur after a blank.

Einheit	Raum	Raumnummer	Nr. / Form	Typ	Beschreibung	Kahmen	Öffnungsart	Wandstärke	Türfügel	Material	Feuerwiderstand	fertigliche	Rohhöhe	Fläche
	Top 1 Keller	60-01	14 / Rechteck	Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²
	Top 2 Keller	60-02	15 / Rechteck	Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²
	Top 3 Keller	60-03	16 / Rechteck	Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²
	Allgemein/Kauffläche	60-04	17 / Rechteck	Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²
	Allgemein/Kauffläche	60-05	18 / Rechteck	Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²
	Gang	60-06		Brandtür	Brandtür	links	120 mm	120 mm	einflügelig	Masaf		800 x 2000 mm	800 x 2200 mm	1,60 m ²

When opening very long reports (at least 1024 pages), there are no error messages anymore, which were caused by the limitation of 1024 manual page breaks in Microsoft Excel.

The raw data, that reports are based on, can now be saved in addition to the reports. If this option is set, a separate file, which ends with ".Daten.xlsx" is saved beside the .xlsx file.

Interfaces

DXF/DWG

New version 2019

The DXF/DWG interface was updated to support AutoCAD up until Version 2019.



SketchUp

New version 2018

SketchUp library parts can be imported until version 2018 in ELITECAD. The export of 3D models supports the latest SketchUp format as well.

Configurable export version

The SketchUp export interface now allows selecting the target version for the export. This enables you to pass data to users who do not have the latest SketchUp version installed.

IFC

As a long-standing member of the buildingSMART, XEOMETRIC sets a strong focus on the continuous development of the IFC interface.



More detailed import

With the new version, the import of IFC files, which are generated from many different CAD applications, was improved dramatically. Due to this revision, all architectural objects now are supported in much greater detail with countless parameters. A strong focus was set on the support of differences between various versions of the exporting applications.

Better treatment of corrupt data

Since the quality of the IFC data varies greatly, it is important how invalid data is handled. We collected experiences over the years and implemented them in heuristics, which can handle errors in IFC files and therefore highly improve the quality of imported data, which greatly improves the quality of BIM projects.

