ELITECAD ARCHITECTURE 17

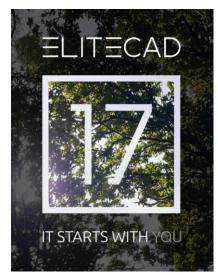Innovations of the new version

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Innovations of the new version

December 2024

Plan a sustainable future - it starts with you! Ultimately, the foundation for sustainability is laid in planning. We are actively at your side, though. Because sustainability is the responsibility of all of us. However, this responsibility can and should be fun. Growing demands and stricter regulations do not mean that your everyday planning must become more difficult. Making complex things simple is our mission, and we are now setting another milestone.

With ELITECAD Architecture 17, you can effortlessly design a world that lasts. The latest version of our planning software is your key to creating a circular future. From the first idea beyond implementation: plan tomorrow's living spaces with joy and ease.

We provide you with the best tools to shape the future for generations: sustainable, efficient, lasting. Use the extensive innovations in terrain modelling and point cloud processing such as the practical clipping box, automatic georeferencing or the new import options for the fastest and most flexible planning with existing data. Benefit from the completely revised parameter management and improved material management in building modelling. Enjoy maximum design freedom for stairs, dormers and when working with rotated coordinate systems. Document your layer structures automatically using attribute stamps and keep an optimal overview with new attribute colours for sustainability criteria.

In ELITECAD Architecture 17, you also get enormous added value without any additional effort thanks to the largely automated integration of environmental product declarations (EPDs) into your models. The extended evaluations and reports always give you a perfect overview down to the smallest detail. Innovations for working on the model in parallel, the IFC 4.3 interface for openBIM projects according to the latest standard and the new PlanRadar plugin also ensure efficient collaboration.

Not enough time to explore our wide range of functions? We have thought of that too. Our innovative AI assistant called Luna will give you more time in the future by advising you and supporting you in recurring tasks. This will free you up to do what is important: shaping the world of tomorrow, in line with our version motto 'Plan a sustainable future'. We hope you enjoy it!

Dr. Wolfgang Stöger
CEO

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Plan a sustainable future

New requirements for digital building models

Digital building models are playing an increasingly central role in the construction industry, particularly with regard to sustainability. This is especially important because the industry has a significant impact on our environment: it accounts for a significant proportion of global resource consumption, is responsible for significant CO_2 emissions and contributes to global waste production. Future requirements therefore aim to make construction projects more transparent, efficient and environmentally friendly. The focus is on integrating extensive data into each digital model in order to better understand and optimize the entire life cycle of a building. But where does this data come from?

In particular, the legal requirements of the Ecodesign for Sustainable Products Regulation (ESPR) and the EU Construction Products Regulation, which is essential for the construction industry, have been pushing for the provision of information to promote ecological sustainability since mid-2024. From 2028 at the latest, all building materials in the EU must meet the ecodesign requirements. Proof of compliance with the sustainability criteria is regulated by the digital product passport (DPP), which in turn is based on detailed information on the ecological quality of building materials - the so-called Environmental Product Declarations (EPD). This data must now be integrated into the digital model in order to enable a life cycle assessment of all phases of a building from the outset, from production through use to disposal.

As a result, consistent and comprehensive digitalization has now become indispensable for all planners. Only through the use of digital technologies can transparency, efficiency and sustainability in construction projects be guaranteed. Other European requirements such as the EU Green Deal and the Taxonomy Regulation also play a central role here. The EU Green Deal aims to make Europe climate-neutral by 2050 and sets out the strategic measures for this transformation. The Taxonomy Regulation, a core component of the Green Deal, has been binding since 2022 in defining which economic activities are considered sustainable. It has a direct impact on construction projects as it sets the framework for sustainable investments and thus also significantly influences planning, material selection and financing options.

Importance of early decisions in planning

The decisive factors for a building's long-term sustainability are set in the early stages of planning. Before the first stone is even laid, key factors influencing energy efficiency, resource use and environmental compatibility are in the hands of planners and those involved in the construction.

As one of the largest sectors of the economy, the construction industry has a special responsibility here: By carefully selecting high-quality, ecologically safe materials, incorporating modern technologies and taking a holistic view of the life cycle of a building, it can make a significant contribution to minimizing environmental impacts and using resources efficiently. By defining clear targets on issues such as CO_2 balance, waste avoidance or energy requirements at an early stage, planning steps can be consistently geared towards sustainability. This forward-looking approach not only saves costs in the long term, but also enables flexible adaptations to future changes in standards, legislation or user needs.

In short: Those who consciously make sustainable decisions during the planning phase not only fulfil a social responsibility, but also lay the foundation for environmentally friendly, economically viable and permanently efficient buildings.

Added value through efficient software and intelligent building models

ELITECAD Architecture 17 opens up completely new possibilities for you to consistently integrate sustainable construction into your planning processes right from the start. Whether your project starts on a greenfield site or not, with the new features for planning existing buildings, even working with complex terrain data and huge point clouds becomes a real planning pleasure. Thanks to the seamless integration of extensive sustainability information into your intelligent building models, you can also work significantly more efficiently and at the same time be significantly more environmentally friendly. Even in the design phase, new functions help you to select materials with a low CO_2 footprint, evaluate energy parameters more precisely and compare constructive alternatives directly.

You also benefit from maximum transparency in the execution and evaluation phase: all relevant sustainability data is available at the touch of a button, can be clearly displayed and weighed against each other in different variants. The visualization, in turn, makes the ecological qualities of your planning even more tangible - thanks to realistic representations of ecological building materials.

In short: With ELITECAD Architecture 17, sustainability becomes an essential part of your entire planning process – without any additional effort, from the initial idea to the comprehensive evaluation of the finished building.

Digital architectural surveying

New assistant for automatic building structure creation

Discover a whole new dimension in digital architectural surveying: With our interactive assistant, you can capture building heights directly from point clouds and effortlessly transform them into precise ELITECAD structures. The innovative clipping box allows you to select specific areas of your point cloud so that you can record floors or parts of buildings in no time at all.

Instead of laboriously entering dimensions manually or carrying out complicated calculations, the assistant automatically integrates the data into your 3D model. This not only saves you valuable time, but also significantly reduces sources of error. Thanks to the intuitive user interface, you are easily guided through the process without needing any in-depth prior knowledge.

Experience how digital architectural surveying becomes child's play and you gain more time for the creative planning of your projects. With this tool you can maximize your efficiency and the quality of your work at the same time.

Focus on the work area thanks to the new clipping box

The innovative 3D clipping box gives you a completely new perspective on your 3D models. You can clip your model from all six sides of a cube and thus gain a comprehensive insight into the interior of your project. The extensively improved clipping allows you to isolate specific areas and concentrate fully on the current work area. By zooming in on the visible objects on the screen, you have an ideal starting point for the clipping box.

A special highlight: clipping can optionally be applied only to the point cloud, while the normal components remain visible. This allows you to work in detail in the point cloud without losing track of your overall model.

You can set the clipping box absolutely or relative to the current working plane or the current coordinate system and save your preferred settings. The intuitive application ensures that you always have a perfect view of your work area. You also benefit from a performance boost that makes your work even more efficient.
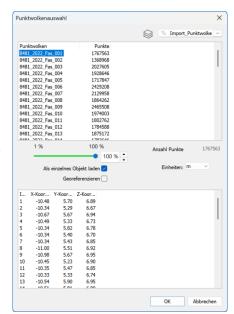
This function allows you to work more precisely and saves valuable time. The new 3D clipping box takes editing your model to a new level and allows you to navigate and edit complex structures more easily.

Advanced import and export options for point clouds

Maximize your flexibility when working with point clouds with our enhanced import and export functions. You can now make more settings when importing E57 files. You now have the option to control what percentage of points should be imported. This filtering helps you reduce the amount of data and optimize performance without losing important details.

Another new feature is batch import, which allows you to optionally import each scan from a point cloud file into separate point cloud objects instead of as a single large point cloud. This saves you valuable time and makes it easier to handle large projects.

For better management, you can select layers when importing to organize your data more clearly. In addition, you can now also export point clouds in E57 format or as an ASCII file, which opens up new possibilities for data exchange and collaboration with partners or other software solutions.
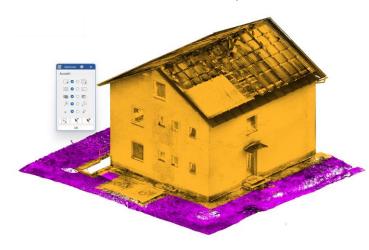
Georeferencing for seamless integration of multiple scans

With the new georeferencing option, loading multiple scans into the same reference system is a breeze. A single click in the import dialog is all it takes to correctly align and position all scans.

Time-consuming manual alignment is completely eliminated, which not only increases your efficiency but also minimizes sources of error. You can rest assured that all data is integrated precisely and consistently, without any additional effort.

More intuitive selection options

With our extensively expanded selection tools, you can now work with point clouds even more intuitively and efficiently. You can make the selection according to your preferences or requirements - whether with a rectangle or polygon, in the working plane or in the screen plane. The selected points are displayed in their own colour, which gives you a clear overview and makes editing easier. In addition, the selection can be expanded, reduced or inverted at any time.

A special highlight is the possibility of using your already defined clipping settings directly as a selection in point clouds. So, if you have already focused on the relevant points, you can now use this view seamlessly for further editing. This simplifies your workflow considerably.

Time savings through numerous performance and graphics improvements

Large point clouds with several hundred million points? No longer a problem! Thanks to significant performance optimizations, you can now work smoothly with extremely large data sets. Importing point clouds has been accelerated many times over, so you save valuable time and can get started right away.

Another practical feature: You can now cancel the import process at any time if you change your mind or have selected the wrong data set. In addition, there is no longer any difference in performance, regardless of whether points are selected or not - processing always runs smoothly and without delays.

Architectural innovations

Fundamentally revised parameter management
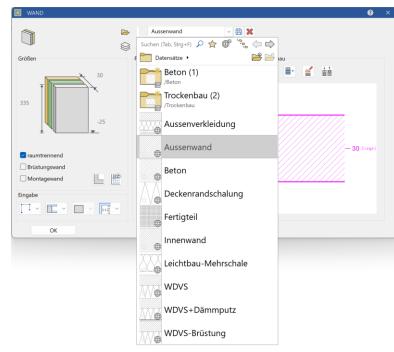
In the past, managing data sets was often laborious: flat lists without graphical previews, without filtering options, without grouping or search functions. Distinguishing between global and user-defined parameters was often difficult. In offices with multiple users, office-global data sets were difficult to distinguish from those supplied. When drawing, you could only identify data sets by their name - if this was unclear or ambiguous, you had to open the settings to see details such as the specific layer structure of a wall.

With the new parameter management, all of this is a thing of the past. We have developed an intuitive and powerful solution that allows you to work more efficiently and clearly. Graphic previews, filter options, grouping and search functions, favourites management and rights management make it child's play to use. You can now find parameters more easily, differentiate them more clearly and organize them individually.

New interactive user interface element for parameter management

We have fundamentally revised the management of your parameters and data sets. With the new Type Control, you now have an interactive element in the user interface that dynamically adapts to your needs. Instead of the previous flat lists, you can now use hierarchies that give you a clear overview of all parameters.

This type control is available for all objects - whether materials, hatching, walls, ceilings, rooms and much more. The hierarchical structure allows you to find the parameters you are looking for more quickly and manage them more intuitively. This means you can work more efficiently, more clearly and more safely.
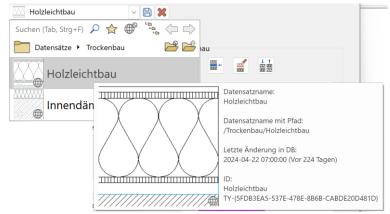
Graphical preview of data sets

The new graphic preview gives you a visual impression of your data sets at a glance, matching the selected representation level. Without having to open masks first, you can use the preview images to quickly identify the details of parameters such as materials, hatching or wall structures. Tooltips

show you larger preview images and additional information that give you a deeper insight into the properties of the parameter. You make the right decisions more quickly and can concentrate fully on the creative design of your projects.

Hierarchical management of parameters in folder structures

Managing your parameters is now even clearer and more flexible thanks to the hierarchical folder structures. Instead of the previous flat text list, you now have an interactive user interface element that you can expand and reorganize as you wish. You always keep track of your position within the structure.

For example, create folders for drywall, brick walls, and other categories to logically group your records. If you prefer a simpler view, there is also an optional flat view of the hierarchy and an optional more compact view. This allows you to switch between a detailed and a clear view as needed.

Directly integrated search and filter function

With the new search function, you can now find the parameters and data sets you need even faster. The option of combining multiple search terms separated by commas allows you to refine your search and get exactly the results you need. Whether it's materials, wall structures or other objects - the intelligent search makes navigating through extensive data sets much easier.

Personalization through favourites management
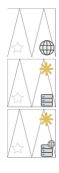
With the new favourites management, you can define your most important data records as favourites at the touch of a button. This gives you quick access to frequently used elements and allows you to easily filter them if necessary. Your favourites are clearly visible thanks to an overlay icon, which makes navigation even more intuitive. This personalization allows you to work more efficiently and adapt your workflow to your needs.

Advanced rights management

With the new rights management, it is now much easier to distinguish between your own global parameters and the delivered global default parameters. You can specifically filter for them or decide not to display them, depending on your needs.

The rights level is displayed as an overlay icon in the preview, so you can immediately see which parameters you created, and which are included with the software. This means you always have an overview and can work more efficiently, as you can concentrate on the data sets that are relevant to you.

You can now see whether a data record is new or has been changed directly from a separate overlay star in the top right. You can configure the time period individually in the options.

Improved material management

In order to meet the increasing demands on sustainability reports and criteria, we have extensively expanded material management. You can now specify materials in your digital models even more precisely. The materials have been supplemented, better structured and optimized for further use in evaluations and plan representations.

Simplified material management by merging material types

In the new version, we have made material management much easier by using a uniform naming system. Previously, materials were divided into different categories:

- Representation level materials that included hatches and line types for standard 2D plan representation
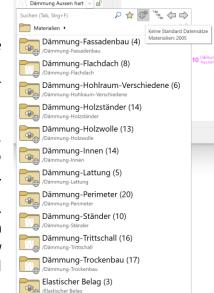- and evaluation materials, which were used to group similar materials for evaluations and reports.

These two types of materials are now simply called "materials", similar to a building material. The visualization materials keep their name and remain separate, now also abbreviated as VisMat.

For you, this means significantly simplified material management. You no longer have to switch between different names but can manage representation levels and quantity materials centrally under the term "Materials". This provides a better overview and helps you find the right materials for your projects more quickly.

This standardization helps to improve consistency in 2D representation as well as in quantities and reports.

Better display through new user interface element for materials
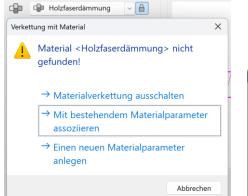
The latest version provides you with an expanded user interface control for materials. Instead of the previous 100 or so linked representation level materials, you now have access to several thousand unlinked materials when configuring components. This enables a higher level of detail for your components and brings advantages when determining quantities, calculating costs and reporting on sustainability. For example, instead of just selecting "soft insulation", you can now directly select "wood fiber insulation" and thus better understand the environmental impact of your choice of material.
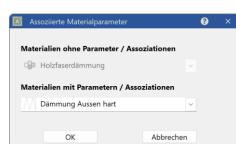
Despite the more extensive material selection, the configuration remains simple and clear thanks to the new hierarchical type control. You navigate intuitively and efficiently through the material hierarchies and quickly find the right material for your project.

High flexibility through associations

One challenge with so many new unlinked materials - without their own representation level information - is of course the standard-compliant plan depiction. Our solution: preconfigured and very easy to create associations to materials with representation level information. You configure

the display once and can use it multiple times using associations, which offers you a high level of flexibility.

New pre-installed parameters

With the new Type Control, you now have the option to efficiently manage significantly more preconfigured data sets. That's why we have extensively expanded the preinstalled parameters and structured them better.

The focus is on sustainable building materials and a clear organization of materials. You benefit from a larger selection of pre-installed parameters that help you integrate sustainable materials more easily into your projects. The improved structuring makes it easier for you to find and select the right data sets, so you can work faster and more purposefully.
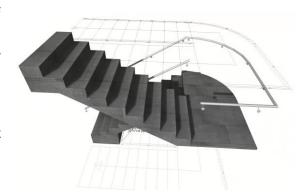
Increased flexibility in the design of stairs

Modular stairs with several straight landings

The modular stairs have been significantly expanded and now allow you to not only string together angled stair sections, but also generate continuous straight stairs. This allows you to create any combination of continuous and angled stairs. This flexibility allows you to plan complex stair constructions more efficiently and precisely.

Simple contour manipulation for landings of counter-rotating and angled stairs

With the latest version, you can now subsequently adjust the intermediate landings of your angled and counter-rotating stairs. The floor plan contour of the landing can be selected, deleted and changed according to your ideas. You can place and correct the contour directly in the drawing, which offers you maximum flexibility and precision.

This function allows you to design stairs even more individually and adapt them perfectly to the spatial conditions.

Handling improvements for locked stair values

The usability when dealing with locked values in stairs has been significantly improved. Now a locked value remains unchanged in the user interface, which gives you more control and security

when creating stairs. This optimization makes handling more understandable and reduces the risk of unwanted changes.

Improved management of dormers
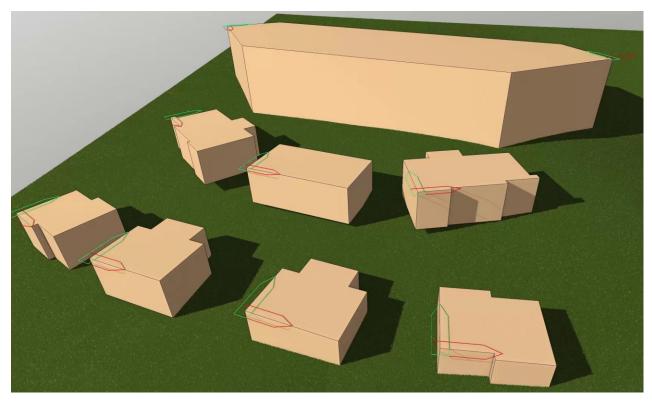
New dormer data sets provide more flexibility for each dormer type
Creating dormers is now even easier and more flexible thanks to new pre-installed datasets for each dormer type. You can also now change the dormer type without overwriting your preset values. This means you have to do less manual input, saving you time and making the process more efficient. This improvement allows you to compare different dormer types with the confidence that they will always stay in the right position.

Usability improvements when placing dormers
The placement of dormers has been made much more user-friendly. Now you can easily place dormers even if the setting values are not perfect. After placement, you have the option of setting and adjusting the dormer optimally. This flexibility saves you time and makes your workflow easier, as you no longer have to specify all the values exactly in advance.
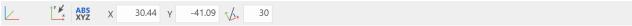
Simplified work with rotated coordinate systems

Working with rotated coordinate systems has been made much easier. You can now effortlessly model in any orientation without having to make complicated settings. The user interface automatically adapts to the rotated coordinate system, allowing you to work intuitively and efficiently. In addition to saving your working time, this also reduces the risk of errors when aligning objects.

Easy manipulation of rotated coordinate systems and reference points using the property bar and handles/ grippers

Working with rotated coordinate systems and reference points is now even more intuitive. Using the property bar and handles/ grippers, you can manipulate these elements very easily. You can grab, move and rotate coordinate systems and reference points directly in the drawing without having to call up cumbersome menu commands. You benefit from direct, visual control and can make changes precisely and quickly.

Automatic adjustment of textures in rotated rooms

In the latest version, texture alignment in rotated rooms has been significantly improved. Textures now automatically adjust to the alignment of your rooms, so that walls, floors and ceilings are always displayed correctly and harmoniously. If you want individual adjustments, you have the option of manual texture alignment. This way, you retain full control over the appearance of your materials (e.g. parquet alignment) and can create unique designs. This function saves you time and makes your workflow easier, as you no longer have to adjust or copy each texture individually.

More design freedom through rotating room labels

With ELITECAD Architecture 17 you get more design freedom thanks to rotatable room labels. You can now flexibly adjust the position and alignment of your room labels. This function allows you to improve the readability of your plans and optimally adapt the layout to your needs.

New live selection preview for rectangle selection

Experience an even more efficient and intuitive selection of components and objects with the new

live selection preview for the rectangle selection. As you move the mouse, the elements are dynamically added to the selection - not just at the end of the selection. You can immediately see which components will be included in the selection.

This feature allows you to make more precise and faster selections because you receive feedback in real time. It also minimizes errors because you can see immediately whether all the desired objects are captured. The live preview significantly improves your workflow and makes working with complex models even more pleasant.

Automatic creation of 3D texts

Now you can generate 3D objects directly based on 2D text with the new function for automatically creating 3D text. This works with any font, giving you maximum freedom in your design.

This function allows you to transform text elements into impressive 3D objects that you can integrate seamlessly into your models. Whether for labels, signs or creative design elements - the possible applications are diverse.

Generation of free line types from texts

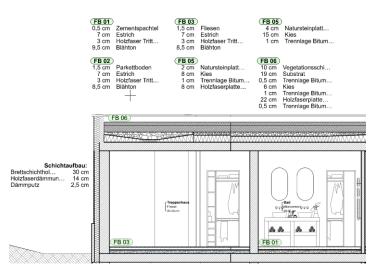Create custom line types directly from text with the new feature for generating free line types from text outlines. This is especially useful for labelling escape routes or other special markings in your plans.

__Fluchtweg Fluchtweg Fluchtweg Fluchtweg Fluchtweg Fluchtweg Fluchtweg __

You can now take text elements as a basis and generate customized line types that meet your exact requirements.

Layout and documentation

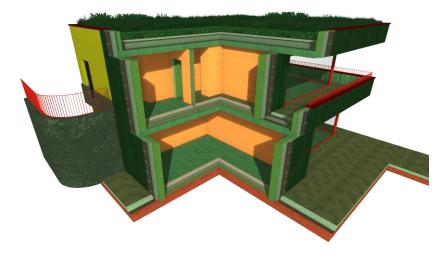## Automatic documentation of multi-layer objects using attribute labels

Previously, manual labelling of objects such as walls or ceilings was often time-consuming and error-prone. With the new function of automatic documentation of layer structures using attribute labels, this process is now considerably simplified. Information such as layer thickness and material used is determined directly from the objects and displayed in the label. This is automatically updated as soon as you make changes. You can customize the appearance so that it meets your needs exactly. Another advantage is the ability to expand it with additional attributes, for example EPD information, which is particularly relevant for sustainability reports.

New attribute colours for sustainability criteria

With the new attribute colours function for sustainability criteria, you get a quick and clear overview of the environmental impact of the materials used in your project. Your model is coloured according to its impact on the environment - for example, with a colour scale from green to red. This allows you to see the CO_2 balance of the building materials used at a glance.

This understandable representation helps you make informed decisions and identify more sustainable material alternatives. The intuitive colour scheme simplifies complex data analysis so that you can work more efficiently on environmentally friendly solutions. This means you are actively contributing to sustainable construction and taking the quality of your projects to a new level.
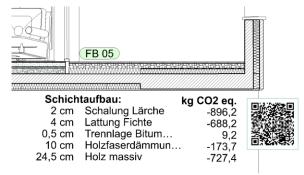
Interactive plans thanks to automatic QR code creation

From now on, you can make your plans even more interactive, because ELITECAD automatically generates a QR code as soon as you paste a link or text. On printed plans, these QR codes allow easy access to digital information - and it gets even better!

Application examples:

- Promote sustainability: Link to environmental product declarations (EPDs) directly in the legend, layer structure or material overview. This allows viewers to access additional information on the sustainability of the materials used.
- Efficient documentation: Share important documents or server releases with planning stakeholders by inserting QR codes that lead directly to the relevant files.
- Support for project participants and executors: Provide access to data sheets or component information directly in the execution plan. A scan of the QR code immediately provides the required details.
- Predefined QR codes in plots and templates: Integrate QR codes into your plot layouts or project templates to provide standardized information and optimize workflow.
- Improved communication: Integrate your virtual business card or link to email addresses, phone numbers or web forms to make it easier to contact people and quickly clarify queries.

Better overview of section lines on all floor plans

In multi-story projects, it was often difficult to keep track of section lines because they were only visible on the floor on which they were created. With the new version, this problem is a thing of the past. Now you can optionally make the section lines visible automatically on all floors. Every change to a section line is updated in all views, so you always have the overall context in view.

Simplified merging and splitting of hatches and dimension chains

In the latest version, you can now split and merge hatches and dimension chains even more easily. This feature significantly improves usability and allows you to flexibly adapt hatches and dimension chains to your needs.

Advanced configuration options for 3D representation levels

The 3D representation levels control the depiction of free 3D objects in the view types floor plan, section or elevation. Previously, the pen, line type and hatching parameters were linked to each other. From now on, you can optionally remove the link and make different settings for each type, thus configuring the depiction even more precisely.

Deletion lines for floor plans in offline mode

Analogous to the practical function of the deletion lines in views and sections, you can now use the same functionality for your floor plans (in offline mode). There is now a practical new entry in the context menu for changing the offline status quickly and easily. This means you can now give your floor plans the individual, final touch.

Attributes, Quantities & Reports

Integration of sustainability information into digital building models

A key focus of the new version is the seamless integration of sustainability information directly into your CAD models. Previously, it was often necessary to estimate values, laboriously collect data and perform manual calculations to create Excel lists for sustainability reports. With the new functions, you can now use your building model as a central source of information and obtain comprehensive sustainability data without much effort.

For you, this means that you get detailed insights into the impact of your building on the environment. You can use the transparent calculations as evidence for certifications, to get ready for the circular economy or to support the financing of your project. Instead of wasting time on laborious manual processes, you can concentrate on creative design while our software helps you to meet and document the sustainability requirements of your project.
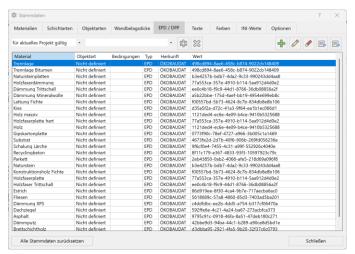
This integration makes sustainable construction an integral part of your workflow, which not only meets current requirements but also prepares you for future challenges.

New management of assignments between materials and EPDs for maximum efficiency and traceability

A key feature of the new version is the efficient integration of environmental indicators, in particular the numerous key figures from Environmental Product Declarations (EPDs) into your building model. Until now, it has been a major challenge to get these values into the model without causing a data explosion or jeopardizing maintainability through countless, distributed and duplicated key value attributes.

The innovative solution now consists in using predefined mappings between ELITECAD materials and EPDs. The best thing about it: These mappings are already delivered with the new version and are ready to use straight away. This functionality is not only intended for new projects, but also works for older projects, so you can benefit from the advantages without any additional effort.

The assignments can be customized individually, for example for specific projects or regional requirements. This offers you maximum flexibility and traceability. The EPDs are assigned to your components at the push of a button, which speeds up the process considerably.

The information obtained can be used in a variety of ways: it can be used in attribute visualization, plan labelling, quantities and reports. This gives you a comprehensive overview of the sustainability aspects of your project and enables you to make informed decisions.

Integration of ÖKOBAUDAT EPD information

With the new version of ELITECAD, you now have direct access to current EPD information from ÖKOBAUDAT. This extensive database for building materials and construction products is directly integrated into ELITECAD, so that you can use valid environmental indicators directly in your projects. When updating data, you always work with the latest and most reliable values.

For you, this means a significant increase in efficiency. You save time researching EPD data and can concentrate fully on planning and designing your projects.

Quantity reports now also with diagrams

Now you can automatically create your reports with diagrams, according to your needs. The diagrams are configurable and offer you the choice between pie charts and bar charts. This visual presentation enables better transport of information and significantly increases the clarity of your reports. The graphical representation makes complex data easy to understand and you get a comprehensive overview of important key figures more quickly. This makes analysis easier and helps you make well-founded decisions.
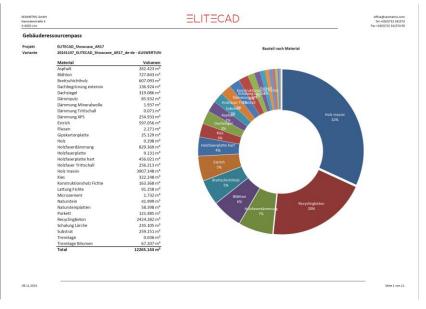
New reports as a basis for certificates and decisions

Our aim is to provide you with concrete key figures for your building in the form of a clear list that can serve as a basis for decisions, for calculations and as proof.

One new feature is the **building resource pass**, which provides detailed information about the quantities of materials used in terms of material requirements and recyclability. This resource pass now also includes the weight calculation of the materials based on the EPD information. This gives you a comprehensive overview of the building materials used, including all relevant EPD data.

With the new reports, you can, for example, determine the CO_2 emissions (Global Warming Potential, GWP) caused by the construction (phases A1-A3) of a new building. You can also analyse the consumption of non-renewable energy for renovation projects or other construction phases.

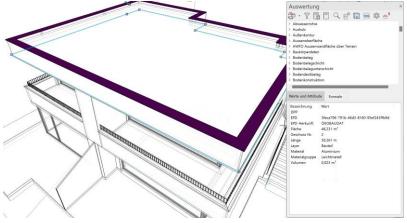These new reports allow you to precisely quantify the environmental impact of your projects and provide transparent evidence. You can make informed decisions to optimize the sustainability of your construction projects and meet the increasing demands for environmentally friendly construction.

Detailed quantities of free objects and free forms

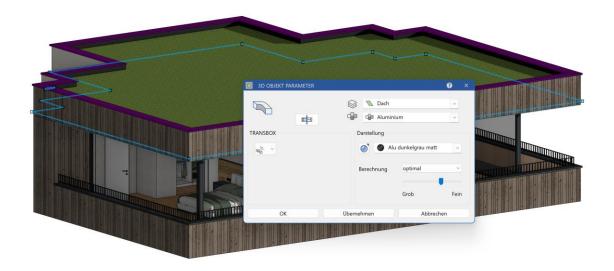### Additional calculations for free objects and free forms
Even objects that are not covered by standard architectural objects have an impact on the sustainability of a building. Therefore, a complete recording of all quantities is required. In the new version, the characteristics of free forms are now included in quantity calculations, including lengths, volumes and areas.

For you, this means that even individual or complex components are fully included in your calculations. You receive a precise and comprehensive analysis of all elements of your project and can make your planning even more precise and efficient.

New material property for free objects and free forms
In the latest version, free objects and free forms now have their own material information. This means that in addition to the standard components, the free 3D geometry is now also considered when determining the quantities of building materials.
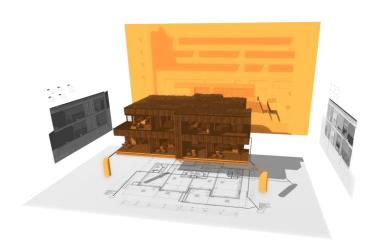
New reports for object type opening

We have tidied up and added to this. Existing reports have now been logically divided into window lists, door lists and opening lists and have been expanded to include numerous new reports. There are now separate reports for wall window openings, roof window openings, door openings, floor openings, wall openings, roof openings, etc. as well as additional separate reports for wall windows and roof windows, each with and without images. This way you always keep an eye on the essentials.

Teamwork & Connectivity

Efficient teamwork through parallel work on the model and in views

Larger projects often require multiple teams to work on different aspects at the same time. While one team is finalizing the design, another is already starting to produce the plans. Previously, however, it was only possible to work on the same model in parallel at floor level. With the new version, this is a thing of the past. Now teams can also produce plans in parallel, meaning they can work in the model and in the views at the same time. This improvement allows you to fully concentrate on your project while everyone on the team is always up to date. Collaborative work becomes smoother and faster, which makes a big difference, especially on complex projects.

Import data management

You or a colleague added external data such as an IFC, a DXF, several SketchUp parts, etc. to your project a few weeks ago and would now like to know what has been added, or would you like to move this data to another layer or structure, replace it with other data, or even delete it? But how are you supposed to find all of these objects and elements distributed throughout the project? In the new version, you can now do just that very easily. All external data added is logged and you have the option of selecting the data from these import processes in the buffer/import filter management at any time. Once you have made the selection, all of the options you know from ELITECAD are available to you.

Management of georeferencing information

Data from different sources often refer to higher-level reference systems, such as a national coordinate system or a special project zero point, and also have a rotation relative to the north direction and a height reference. The handling of this often heterogeneous data has been harmonized and made significantly easier in ELITECAD Architecture 17.

To clarify: Georeferencing does not mean considering the curvature of the earth and converting between different global reference systems. These aspects do not play a role in building construction projects.

The CAD reference point describes an offset and a rotation compared to the drawing. You can now place this reference point at any position in the model, display it with a new symbol and easily set the coordinates and rotation for this point using a new property bar. This means that it is no longer necessary to display the symbol for a zero point that is far outside the paper format.

When georeferenced data (drawing, terrain, point clouds, IFC, DXF) is imported for the first time, the reference point is created in the middle of the sheet. When additional georeferenced data is loaded, it is automatically aligned to the existing reference point. This greatly simplifies the process, saves you the hassle of manual alignment and avoids errors.

Maximum compatibility thanks to IFC 4.3 support

IFC is the most important data interface in openBIM projects and enables the smooth exchange of building data between different software solutions and project partners. Only those who are always up to date can work effectively with all those involved throughout the entire life cycle of a building. With support for the latest IFC 4.3 standard, you are well prepared for the future. Both the import and export of IFC data are fully supported, so you can ensure maximum compatibility with your project partners.

Extended IFC Export

Extended BaseQuantities

For years, ELITECAD Architecture has been offering you precise calculations of masses, quantities, lengths, areas, volumes, etc. with its integrated evaluation. We also export this information in the form of so-called IFC BaseQuantities when exporting to IFC. BaseQuantities, as part of the IFC standard, offer a uniform method for exchanging quantity information between different software platforms, thereby ensuring interoperability and avoiding data loss. The transport of consistent and accurate quantity information helps you reduce discrepancies between design and execution and promotes better collaboration between architects, engineers and construction companies. And it is precisely for these reasons that numerous new BaseQuantities are calculated for all objects in the new version and exported to IFC.

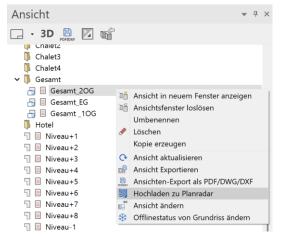## Walls as beams now exported as IfcBeam

Due to special requirements for object properties, it is sometimes practical to evaluate walls as beams. In the new version, these walls marked as beams are now also exported as IfcBeam elements during IFC export.

New PlanRadar Plugin

With the new PlanRadar plugin, you can integrate the best tool for cloud-based plan management directly into ELITECAD. This plugin enables you to collaborate efficiently in your projects by allowing you to upload plans directly from ELITECAD Architecture 17 via the views manager. Thanks to intelligent versioning, your plans are always up to date and everyone involved in the project is always well informed. This not only simplifies co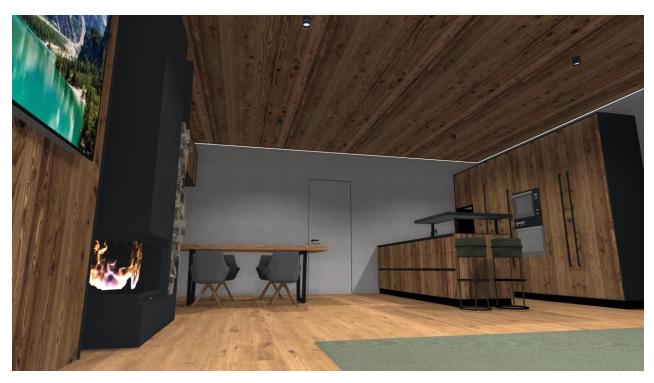mmunication within the team, but also increases the efficiency and quality of your work. With this integration, you save time and reduce sources of error, as there is no need to manually exchange plans.

Visualisation

Improved management of light sources

Good light is crucial for impressive visualisation effects such as shine and reflection on surface structures. The management of light sources has been significantly improved in the new version. You can now add, edit and adjust light sources even more easily, giving you more precise control over the lighting of your projects. You can now create more realistic and atmospheric lighting scenarios with just a few clicks. This saves you time and increases the quality of your presentations, making your projects even more impressive.

Easier linking of light sources to objects
In the new version, linking light sources to objects is made much easier. You can now easily link objects or furnishings, such as a lamp, to a light source. When you copy or move the object, the associated light source is automatically copied or updated.

Grouped light sources
With the new grouped light source feature, you can now group multiple light sources together to control them together. In visualisation or walking mode, you can easily interact with a light switch and, for example, turn all the spots in a room on or off at the same time. This extension gives you more flexibility and control over the lighting scenarios in your projects and allows you to create more realistic and dynamic lighting moods.

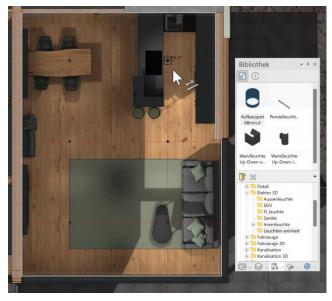### Realistic visualisation effects through light animations
Experience even more realistic visualisation effects thanks to new light animations. Interaction with light sources is now possible in walking mode - you can switch them on and off as if you were actually in the room. In addition, lamps have a luminous material in addition to the linked light

sources when they are switched on. This makes them appear even more authentic in the visualisation and you can create an immersive atmosphere in a playful way.
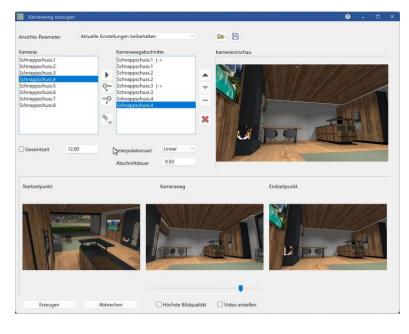
Perfectly illuminated scenes through new library parts

Achieve optimal lighting for your models with the new pre-installed library parts. We have added an extensive collection of lamps that are already equipped with linked light sources - including spots, up-down lights and panels. It is very easy to use: drag and drop the desired lamp into your model and it is ready to use!

This extension allows you to perfectly light scenes quickly and without any additional effort. You no longer have to add or configure light sources manually, as all the necessary settings are already integrated into the library parts.

Easy management and editing of camera paths

The new version of ELITECAD makes managing and editing camera paths much easier. Now you can organize your camera paths directly in the camera management. You can name them and subsequently manipulate them parametrically, giving you more control and flexibility when creating videos.

Playing camera paths and creating videos are now possible directly from the camera management. With even fewer clicks, you can create impressive visualisations. The new version also offers more fle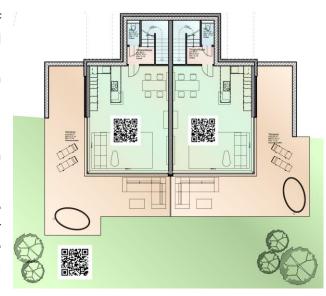xible resolution configuration when creating videos. For example, you can create videos and reels in portrait format for social media platforms. #madewithelitecad

Interactive 2D plans thanks to QR codes and 360° images

With the new QR code generation feature on plans, you can now integrate visualisations such as videos or 360° images directly into your 2D plans. This gives your viewers interactive access to detailed information. For example, you can insert a QR code for each room that leads to a 360° image or video. This allows customers or partner companies to experience the room concept up close and get a better idea of your designs.

Another use case is placing QR codes of furniture that open an AR viewer (augmented reality). This allows viewers to experience the piece of furniture virtually in their own environment and thus better assess its effect in the room. These interactive elements enrich your plans considerably and offer real added value by combining static representations with digital experiences.

By integrating QR codes, you improve the communication and comprehensibility of your projects. You create a modern and innovative presentation experience that inspires both customers and partner companies. With just a few clicks, you provide a deeper insight into your planning and set yourself apart from the competition.
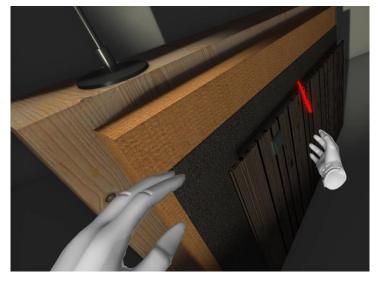
Latest VR technology thanks to integration of the OpenXR platform

Experience virtual reality in ELITECAD on a whole new level thanks to the integration of the OpenXR platform. This extension gives you optimal support for the latest hardware, such as the Meta Quest 3. You not only benefit from wider device compatibility, but also from improved performance that makes your VR experiences even smoother and more impressive.

With OpenXR you can experience and present your projects in an immersive way. Immerse yourself directly in your models and get a realistic sense of space that revolutionizes planning and presentation. This technology opens up new possibilities in communication and internal design processes. Thanks to the seamless integration, the setup is straightforward and you can get started right away.

New room scale VR mode of transportation

With the latest version, ELITECAD now supports room scale VR locomotion including auto follow of the body. This means you can move freely in your physical space with your own legs and every movement you make is transferred directly to the virtual environment. Auto follow ensures that the virtual scene adapts seamlessly to your position, even if your physical space is limited. This extension allows you to delve even deeper and more immersive into your projects and benefit from a more natural interaction with your models.
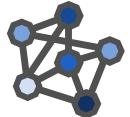
Artificial Intelligence

Native integration of AI in ELITECAD

We at XEOMETRIC see great potential for a revolution in everyday planning and thus a significant increase in efficiency through the use of artificial intelligence (AI). Our clear aim is to automate recurring, unexciting and time-consuming tasks so that you have more time for what is important: the creative design process - after all, your creativity is indispensable.

By specifically integrating AI directly into ELITECAD, we create real added value instead of just generating pretty images without a personal touch. We are convinced that this can lead to a massive increase in efficiency and quality. We are currently focusing on the direct integration of variants of large language models from OpenAI that we have specially trained.

Data protection is our top priority. We do not train models with user data, so your information always remains safe. Our long-term goal is to provide an offline version that works without an internet connection and still offers full AI functionality.

With this innovation, we want to give you tools that make your everyday work easier and help you exploit the full potential of your projects. You can concentrate fully on your creative tasks while the AI efficiently supports you with time-consuming tasks.

Luna Assistant

A new, native AI assistant called Luna will soon be available to optionally support you in your daily work in ELITECAD. Luna is integrated directly into the software and is there to help you make your workflows more efficient and pleasant. With intelligent functions and personalized help, Luna makes many tasks easier for you, giving you more time to concentrate on creative design tasks. Luna will be continuously expanded in several phases over the course of the year. So you can look forward to regular updates and new functions that will optimize your workflow even further. Whether it's quick answers to questions, automated processes or helpful tips - Luna is constantly evolving to meet your needs as best as possible.

With Luna at your side, you benefit from intuitive operation and increased productivity. You can concentrate fully on your creative projects while Luna takes care of time-consuming details. Discover now how Luna revolutionizes your everyday work and helps you get the most out of ELITECAD.

Improved workflow through quick access to information

With the new AI assistance in ELITECAD, your workflow will noticeably improve thanks to quick access to important information. Luna has extensive knowledge in the areas of architecture, construction technology and ELITECAD functions. You can ask her questions at any time and receive useful answers directly in the software. This saves you time because you no longer have to spend a long time looking for solutions yourself. Whether it's about specific ELITECAD functions or technical questions about architecture and construction technology - Luna is there to help you competently.

Seamless integration into your work environment

You no longer have to switch between different applications because Luna is directly integrated into ELITECAD. This central communication allows you to work more efficiently and with more focus.

You can ask Luna questions at any time and receive comprehensive answers that can include text, images, tables and even CAD content. This means that you get all the information you need for your work directly in your familiar environment. Whether you have technical details, specific functions or general architecture questions - Luna is there to help you with her extensive knowledge.

Optimal support through context awareness

With Luna's skills, you get a competent sidekick for your daily work. If you wish, Luna can analyse the current CAD context and offer you valuable help exactly where you need it. This means that Luna gives you targeted tips and support on what is currently happening in your CAD window.
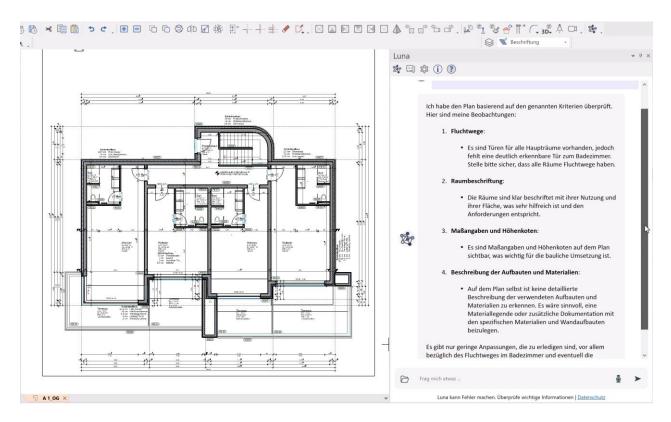
A practical example: Before you send a plan to the building authority, Luna can evaluate the plan according to certain criteria and give you feedback. This way you can ensure that all requirements are met and avoid unnecessary queries or corrections.

Automation of tasks directly in ELITECAD

Thanks to Luna's knowledge of ELITECAD, you can automate routine tasks directly in the software. Luna has direct access to the ELITECAD functions and thus offers you numerous possibilities and use cases. A practical example is support with inventory: Luna can read out old plans, create building structures and remodel floor plans. This speeds up your everyday planning and at the same time increases the efficiency and precision of your work. By automating recurring tasks, you can concentrate fully on the demanding aspects of your project while Luna ensures everything runs smoothly in the background.

Increasing efficiency through individualisation

Another key advantage of Luna, the intelligent assistant in ELITECAD, will be the possibility of customisation in the future. In a next version, you will be able to adapt Luna to your specific needs and train it with your own specifications. This means that Luna not only provides general knowledge, but also learns your individual office standards and helps you comply with them.

This adaptability helps Luna to help you work more efficiently and avoid mistakes. For example, it can check whether your projects comply with company-specific guidelines and give you helpful tips when deviations occur. This way, you can ensure that all your plans are created consistently and according to your office's specifications.

ELITECAD Insider Program - Be part of the future

The world of artificial intelligence is dynamic and offers countless exciting possibilities. Security and data protection are our top priority. Our developments are already showing promising results, but there is still work ahead of us.

The new AI functions will gradually become available as a separate, optional module over the course of the next year. If you don't want to wait that long and are keen to test the latest features in advance, you can sign up for the ELITECAD Insider program. This allows you to try out the latest functions, contribute ideas and help shape the future.

Places are limited – so be quick and become an **#ELITECADinsider**! We look forward to receiving your application so that we can shape the future of ELITECAD together with you.
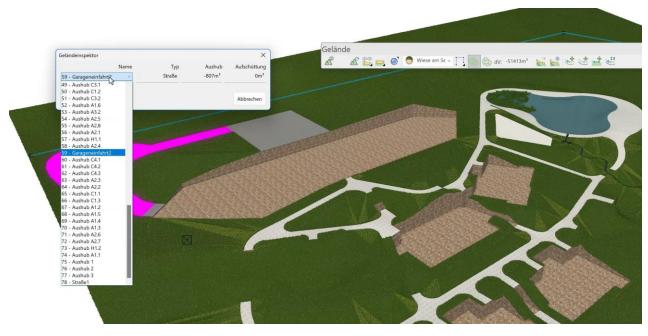

Earth movements can be checked quickly in both the quantities manager and the terrain inspector. This means you always have an overview and can make targeted adjustments if necessary. This transparency makes it much easier for you to calculate earth movements for your construction project. You can estimate costs more accurately, plan resources more efficiently and identify potential problems early on.

Drainage via point/contour

In version 16, ceilings and rooms were expanded to include the option of drainage via a lowest point or via a drainage contour. These exact settings are now also available for excavation. This means that the excavation fits perfectly to the ceiling above.
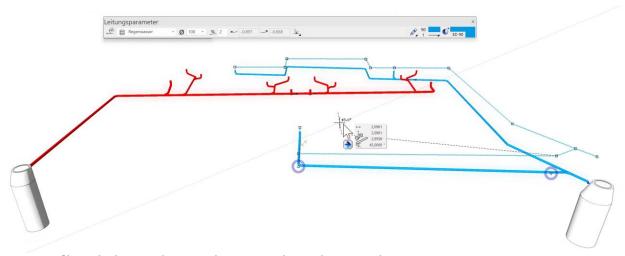
Terrain export

The terrain surface can now also be exported as a point grid to an ASCII file. The same formatting options are available as when importing and you can return the terrain to your project partners or continue editing it with other tools.

Drainage module

Improved usability through intuitive handles and grippers

Creating drainage networks with the drainage module in ELITECAD is now much more user-friendly. We have aligned the drainage with the other components in the program and equipped it with intuitive handles and grippers. This makes subsequent changes much easier. You can select, move, rotate or adjust the properties of drainage elements directly in the model without having to go through complex menus or redraw elements.

More flexibility when adjusting heights and positions

Simply select a line, a load point, a shaft, etc., select the displayed handles and grippers and intuitively make the desired changes, such as adjusting heights or positions. Simply efficient - just as you've come to expect from ELITECAD. This makes drainage planning fun too.

Automatic updates through improved editor

Pipes, load points and shafts now have an improved editor. Lines can be changed later and, where possible, gradient calculations and three-line lines are updated with the known values. 3D handles can be used to set heights at specific points and then remove their fixation again.

Furthermore, position changes of lines and load points that belong to a common network are automatically updated by the editor.