Allplan BIM 2008 Engineering

New features since Version 2003

Allplan sets clear standards with each version. This is an overview of the new features in recent years, and provides you with detailed information on the additional features Allplan has introduced since the version you currently use. Discover the benefits and order your upgrade to the current Allplan 2008 now.

Ease of use and speed

- The workspace can now be rotated for optimum workspace ergonomics.
- The user-defined screen background color provides ergonomic contrast.
- During layout, you can arrange overlaid elements at a different depth as required.
- For texts and dimension texts you can omit background that adversely affects readability.
- New grids provide support for drawing.
- Chinese, Arabic and many other characters make Allplan even more international.
- When files are imported, they are displayed in a preview.
- The 256 line colors now available afford you full design freedom.
- New bitmaps with transparency are ideal for using photos for patterning, for example.
- The new fill areas with color gradients and transparency enable you to design plans and reports flexibly.
- With the enhanced OLE technology, you can edit e.g. Word and Excel documents directly in Allplan.
- The new pixel image editor permits the subsequent editing of rendered images and photos directly in Allplan.
- The express refresh function enables fast zooming and moving.
- You can now use "handles" to move or resize any elements.
- You can use the SHIFT key to activate the useful orthogonal function.
- You can now draw dimension lines and elevations more quickly and with more flexibility.
- Intelligent x-refs enable you to change identical furnishings simultaneously, for example – now with Allplan point snap.
- As an alternative, Allplan enables drawing files to be stored and loaded using the Windows Explorer – ideal for training up new employees quickly.
- With the new Allplan text editor, you can write with format properties as in Word.
- For greater flexibility, you can now also undo work steps after you have saved.
- The cursor snap is now generally available for drawing.
- With the new object snap and object snap tracking, you can now snap design elements with even greater accuracy.
- The enhanced point input function available since version 2003 is now even more user-friendly and replaces classic point input.
- All basic elements now have handles for resizing, moving, and rotating as required.
- The zoom feature is now intuitively available directly via the right mouse button.
- You can now also zoom during area selection.
- Elements can now also be deselected using the activation frame.
- The speed of zooming and moving screen content has again been considerably increased.

Highlights

- Decisive improvements in user-friendliness and speed
- Faster shell and design planning
- Quantum leap in reinforcement technologies
- Structural analysis has become round-trip engineering
- Enhanced functionality for civil engineering
- Improved interdisciplinary collaboration and simplified administration
- Compatible with Windows Vista® and installation also on Apple computers
- Current interfaces for 2D and 3D data exchange

- The position of the dimension text is now based on configurable rules (e.g. DIN, SIA).
- Custom label styles can now be exchanged, enabling you to work faster.
- In the text editor, a quick selector displays the most recently used fonts.
- Bitmap areas can now have any hidden color and are optimized for large data volumes.
- Design windows can now have a polygonal form for greater design freedom.
- For optimum computing performance e.g. in the case of complex designs, the data volume per drawing file can now be up to 256 MB.
- If two monitors are used, all the dialogs now note the most recent status and the window split is retained across the screens.
- In Allplan, a user-friendly profile selection can be used to configure the right drivers for certified graphic cards even more quickly. The certificate represents optimum speed e.g. for animations.
- With the new input palettes, the drawing area is not only larger, the changes are also easier to make and work runs more smoothly.
- To simplify work and avoid errors, the storage locations for files can now be user-defined as in MS Office. You can set individual default values.
- For an optimum overview when drawing, the crosshairs now have a new activation preview: when you approach an element, it is highlighted in a color and the element properties such as element name, pen, line, color, layer, segment and sequence are displayed.
- The screen content can now be displayed for the layout check, screenshots or screen prints easily without construction lines.
- Rapid selection can also be used to select the plan set and set of rights.
- For faster activation of elements, you can now use a shortcut menu similar to that for point entry.
- For targeted modification, you can now limit the properties of elements step-by-step, for example. The filter result is displayed immediately on screen and the filter steps can be carried out in any sequence.
- You can now easily filter by hatching and pattern numbers. Activated points are displayed so that reliable modification is possible.
- A new color and pen assignment dialog in Allplan permits greater design versatility.
- To ensure smoother teamwork, newly created catalogs are now immediately visible for all users.
- Layout elements can now be exchanged very easily
- It is now possible to carry out a batch plot with Windows drivers.
- To rectify accidental copying of two identical data records to the same position, you can now use the "Delete Duplicate Element" feature.
- You can now easily assign start and end symbols to elements such as lines, polylines and circles: you can therefore turn a line into an arrow or a polyline into a chain, for example – ideal for flow charts.
- To create plans more quickly, elements such as lines and circles can now be evenly aligned or distributed very easily.
- For a faster workflow in 2D design, when two elements intersect, you can now immediately cut the second element to fit: the preview displays all realistic cutting options.
- The resizing of elements is now even faster: you can now take the required influence area directly from another component.

Shell and design drawings

- The animated preview makes the input of components more intuitive.
- You can now draw and edit directly in the animation window.
- Associative dimension strings increase the quality of your designs.
- You can now obtain typical shell drawing representations in the floor plan (soffit, dashed walls and so on).
- Design presentation is becoming increasingly important: New default settings provide immediate and attractive visualization of the shell and reinforcement.
- Specific steel constructions modules for Allplan are now available (optional).
- Associative views with soffit, section border and element sequence are now available for easier shell design.
- With special commands for strip, pointpad, and slab foundation as well as any 3D foundation, foundation design is now even easier and clearer.
- Openings in curved walls are now easier to create and dimensioning has been optimized.
- Allplan now intersects handrails even more precisely.
- Walls can now be rotated very easily using a freely definable shortcut.
- With just a few clicks you can generate custom surfaces and shapes,

e.g. for three- and four-point canopies, banners, etc.
- Every user can set up a project for component-oriented planning with storeys, floors, structure and file splitting with just a few clicks and no need for expert knowledge of the system. A new storey manager and model wizard make this possible.
- The Allplan components are now better modified to meet the requirements of current trends such as BIM, IFC data exchange and energy analyses.
- Allplan now offers even more flexibility for the creation of foundations e.g. off-center foundations, slab foundations, etc.
- Dynamic lists such as bending schedules can be used for flexible design and reliable legend display and maintenance directly in the drawing file.
- The design of openings in Allplan is now even easier.
- A special modeler for railings, fences, sills and other linear, evenly subdivided components accelerates your work.

Modern reinforcement technologies

- The new DIN 1045-1 and the new mesh types, diameters, and concrete qualities are now implemented in all reinforcement modules.
- For a newly created section, automatic section dimensioning of the shell and reinforcement is possible if required.
- The newly integrated punching shear design from HALFEN-DEHA takes account of the automatic increase of the required longitudinal reinforcement.
- Thanks to hook definitions, the steel-saving DIN 1045-1 auto area reinforcement makes anchorage detailing easy and reduces reinforcement by allowing any form of slab edge reinforcement to be used.
- New, flexible overlap variants for mesh reinforcement save items.
- Schema and bending shape representations in the lists are now even easier to read.
- With the FF components you can now reinforce automatically on the basis of 2D shell designs.
- The fixtures now have visibility control and can be arranged along elements.
- For key plans, lists for bar marks and intelligent additional texts are now possible.
- FF reinforcement can now be managed even more effectively thanks to handles for entering bending shapes and components.
- The layout of reinforcement drawings has been further improved: All texts in Arial, improved dimension line type leader
- Allplan now provides color coding for the number check.
- Bending rollers are now retained across all bar segments.
- The lengths of the mesh reinforcements are now also given in mm.
- The reinforcement schedules have been optimized: Building lists for reinforcement, angle dimensioning in bending schedules, and complete page numbering.
- The new BSTG variation mesh types A through E, HS and HT, and the DBV-DS continuous high chairs have been added to the cross-section catalogs.
- A new functionality for ERICO-LENTON screw connections is now available: Standard, reducing, position, weldable, and combination couplers as well as end anchorage with automatic modification of reinforcement, special display, and bar segment labeling on the schema and in reinforcement schedules and coupler schedules.
- The new PEIKKO connections functionality lets you place anchor plates and bolts, punching reinforcement, column, wall, and joist hangers from article catalogs.
- Bar reinforcement, mesh reinforcement, fixtures and many other elements can now be moved and resized more intuitively using handles.
- The new property palettes for engineering mean that elements in one place and with the same logic can be created and modified at the same time. Unnecessary functions are simply hidden and you enter the parameters straight in a graphic.
- The associative views are now available not only in shell design but also in reinforcement design: this means you can place reinforcement directly. Changes are automatically updated in all drawings.
- Round components such as circular foundations, walls or ceilings or engineering structures such as digestion towers, silos, water reservoirs, helicopter landing sites or wind power stations can now be reinforced more efficiently: thanks to the new circular, ring and spiral reinforcement.
- One-sided, double-sided offset and beveled corbel supports can now be reinforced more efficiently: Allplan provides a non-colliding reinforcement proposal.

- For even more practice-oriented design, special functions for Schöck lugs, ancotech steel mushrooms and Anahütte couplers are now available.
- You can now determine the planned engineering quantities and the corresponding costs even more exactly: the quantity takeoff now takes into account components such as steel bars and meshes, formwork and fixtures.
- Concrete strength classes, steel grades, bending pin diameters, hook and anchorage lengths, offset values and how all these are displayed can now be adapted even more flexibly (scripting language)
- You can now create your own templates for Allplan lists and Excel spreadsheets.

Round-Trip Engineering

- You can start component measurements to DIN 1045-1 directly by clicking the relevant item in Allplan.
- Allplan automatically transfers the component geometry, support conditions, and dead weights to the F+L FEM programs.
- You can now carry out integrated and very flexible FEM calculations for plates and discs using the F+L FEM programs in Allplan.
- On request, Allplan provides dimensioning values from the F+L FEM modules.
- With the SCIA 3D FEM structural analysis software, you can calculate and measure extremely demanding, non-linear, and dynamic structures in accordance with all the conventional standards, and can use the results in Allplan to directly reinforce plates and discs.
- Optimized connection to the Plate PLT and Disc SC7 modules from Friedrich + Lochner through the direct creation and sending of input files, option of importing drawing files and DXF files.
- Improved connection to SCIA
- You can now transfer load-bearing components directly from Allplan and use this to automatically generate the structural system in SCIA.ESA PT. In the event of changes to the layout, support is provided by a sophisticated update mechanism. (optional)
- Allplan 2008 now includes a fully integrated version of the F+L FEM plates program. The new property palette is used to enter all the information: from geometry, support conditions and material properties to variable actions. This is all computed in the background. Users only need to learn how to use one system and can also use the high-performance CAD functionality for structural calculations. (optional).
- Round-Trip Engineering has been further perfected: Allplan now distinguishes between bearing and non-bearing components. In SCIA.ESA PT you can also get started with the structural system and create the structure model with real components based on it. This way you can switch easily between the architectural and structure model and the structural system. (optional)

Civil engineering

- Specific improvements have been made to make the creation and evaluation of a terrain model even more user-friendly.
- You can now design and present parameterized engineering structures and earthworks.
- With the new tractrix module, you can check tight road details or plan e.g. delivery by articulated truck.
- You can now create traffic circles with several junctions more quickly and easily.
- For a complex road, land, and access design, you can now also apply blanking to pattern lines, splines, and clothoids.
- With the new cadastral plan feature, you can import existing underground services plant data (manholes, sewers, water, gas) to Allplan via Excel to effectively supplement your designs.
- A special road construction module has now been integrated in Allplan (optional).

Collaboration and administration

- During team project work, you can now remove and integrate computers at any time.
- You can now generate designs of any size as PDF files directly in Allplan: The exact representation is retained and the Allplan layers can be shown or hidden as layers in the PDF.
- The new, script-controlled silent setup enables data transfer and parallel installation, among other things.
- You can now install service releases automatically.
- When the license server is used, a mobile computer no longer needs a dongle for "borrowing" licenses.

- With multi-layout import for DWG and DXF, several layouts can now be imported from AutoCAD in a single step.
- NDW files are now resource-independent: the NDW file looks the same in every Allplan installation.
- X-refs are transferred as x-refs or Allplan drawing stacks during import and export in Allplan.
- The resolution of pixel images, color gradients, and OLE objects can now be configured during PDF export.
- You can now import PDF files: lines, texts, pixel bitmap areas and layers are transferred from Allplan for further processing. (optional).
- Allplan can also be installed on Apple hardware with an Intel processor, if you use the Windows XP operating system with "Boot Camp".
- Allplan is now compatible with Windows Vista: ideal if you want to use new hardware.
- Allplan now has the latest AutoCAD 2007 import and export.
- You can now integrate an Allplan model in a PDF at the touch of a button. The user can view and turn the model in the free-of-charge Adobe Reader, define sections and hide and show elements. This helps you simplify communication with building clients and planning partners. Without add-ons.
- You can now directly reuse animations integrated in PDFs directly in Allplan. The existing design layers or scale information are applied, so that the structure is also mapped in Allplan.
- Data exchange with MicroStation V8 is now possible using the latest version of the DGN format. There is no need for the extra work involved in converting data.
- For simplified, file-based data exchange between Allplan users of the same and different versions, Allplan now has its own file format NDW, which draws together all the relevant information in a single file.

Further information

If you need additional information please contact your local Nemetschek dealer or visit us at our website at: www.nemetschek.com