

Allplan 2006 Engineering

New Features since Version 2003



Overview of new Features in
Allplan 2003, Allplan 2004,
Allplan 2005, and Allplan 2006.

Allplan sets clear standards with each version. This is an overview of the new features introduced into Allplan since the version you currently use. Discover the benefits and order your upgrade to the current version of Allplan 2006 now.



Ease of Use and Speed

New Features in Allplan 2003

- ▶ With the enhanced, user-friendly point input functions, you can draw using a minimum of clicks.
- ▶ The accelerated animation window lets you work even quicker.

New Features in Allplan 2004

- ▶ The drawing space 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 different depths as required.
- ▶ Background areas that adversely affect the readability of text or dimensioning can now be omitted.
- ▶ New grids provide additional assistance when 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 example, when using photos for patterning.
- ▶ The new fill areas with color gradients and transparency enable you to design plans and exposés flexibly.
- ▶ With the enhanced OLE technology, you can edit for example Word and Excel documents directly in Allplan.
- ▶ The new pixel image editor permits the subsequent editing of rendered images and photos directly in Allplan.

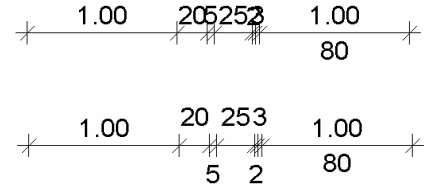
Highlights

- ▶ Decisive improvements in user-friendliness and speed
- ▶ Faster shell and design drafting
- ▶ Quantum leap in reinforcement technologies
- ▶ Structural Analysis has become Round-trip Engineering
- ▶ Enhanced functionality for Civil Engineering
- ▶ Improved interdisciplinary Collaboration and simplified Data Administration

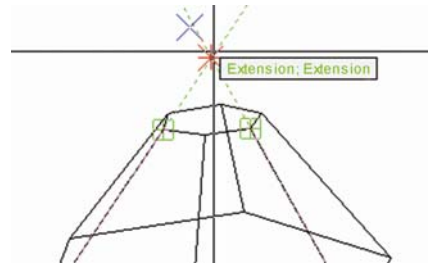
New Features in Allplan 2005

- ▶ The express refresh function enables fast zooming and moving.
- ▶ "Handles" can be used to move or resize any elements.
- ▶ The SHIFT key can be used to activate the useful orthogonal function.
- ▶ Dimension lines and levels can be drawn more quickly and with more flexibility.
- ▶ Intelligent X-Refs enable you to change for example, identical furnishings simultaneously – now with Allplan point snap.
- ▶ As an alternative, Allplan enables drawing files to be saved and loaded using the Windows Explorer – ideal for training new employees quickly.
- ▶ With the new Allplan Text Editor, you can write using format properties as in Word.

- ▶ Elements can now also be deselected using the activation frame.
- ▶ The speed of zooming and moving screen content has again been considerably increased.
- ▶ 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 shape for greater design freedom



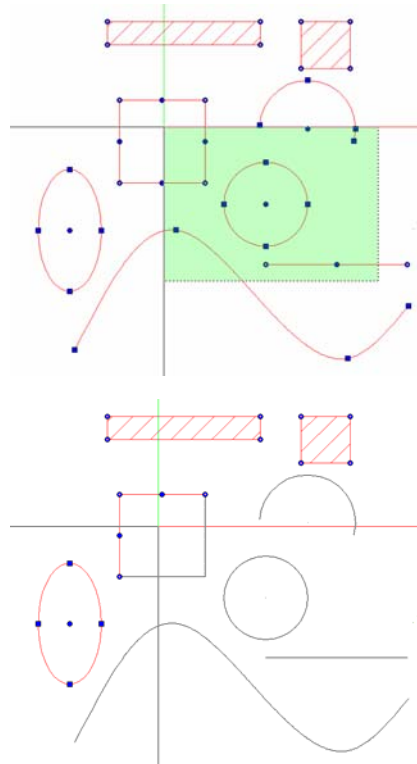
New in Allplan 2006: Dimension text based on configurable rules



New in Allplan 2006: Object snap tracking

New Features in Allplan 2006

- ▶ Work steps can now be undone after you have saved the drawing, greatly improving flexibility.
- ▶ The polar 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 the classic point input.
- ▶ All basic elements now have handles for resizing, moving, and rotating as required.
- ▶ The zoom feature is now intuitively available via the right mouse button.
- ▶ Zooming is possible during area selection.

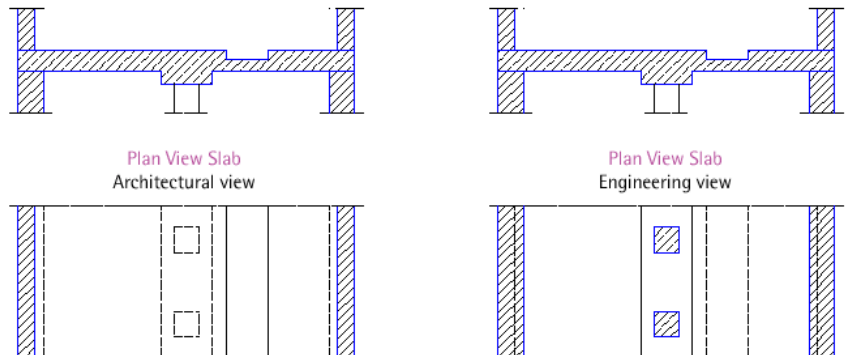


New in Allplan 2006: Deselection using the activation frame

Shell and Design Drawings

New Features in Allplan 2003

- ▶ The new wall axis allows you draw walls for general arrangements even more clearly and easily.
- ▶ New, parameterized components in the component modeler enable you to work more quickly and flexibly using additional standard components.



New in All plan 2006: Associative views for shell design with soffit, section border, and element sequence

New Features in Allplan 2004

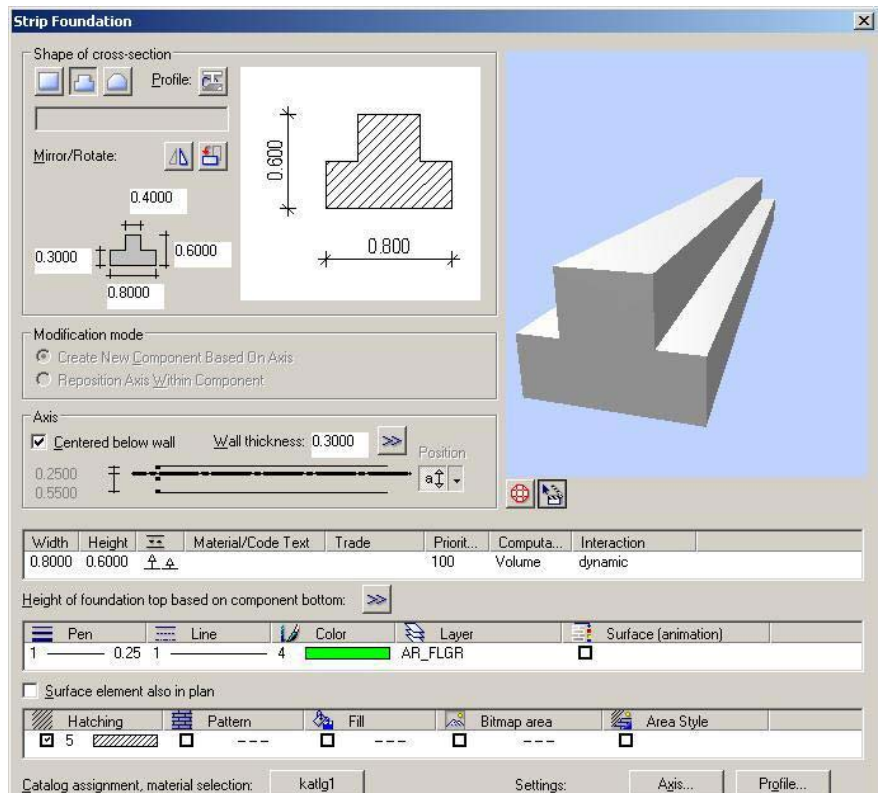
- ▶ The animated preview makes the input of components more intuitive.
- ▶ It is now possible to draw and edit directly in the animation window.
- ▶ Associative dimension strings increase the quality of your designs.

New Features in Allplan 2005

- ▶ Typical general arrangement representations in the floor plan (soffit, dashed walls, etc.) are now possible.
- ▶ Design presentation is becoming increasingly important: New default settings provide immediate and attractive visualization of the shell and reinforcement.

New Features in Allplan 2006

- ▶ Associative views for shell design with soffit, section border, and element sequence
- ▶ The new strip, pad, and slab foundation components and the general 3D foundation feature enables flexible foundation design.
- ▶ New feature for entering openings in curved walls
- ▶ Improved dimensioning for columns and curved walls

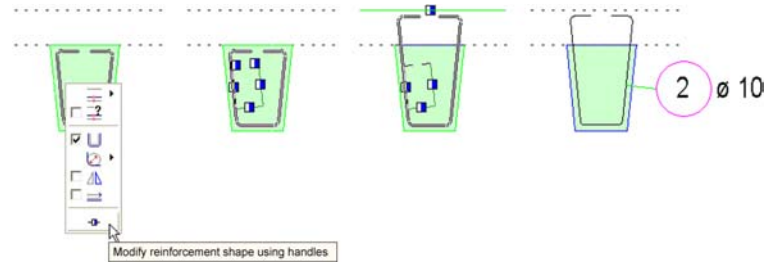


- ▶ Improved stair/ handrail intersections
- ▶ Freely definable shortcut for rotating a wall (direction of axis)

Modern Reinforcement Technologies

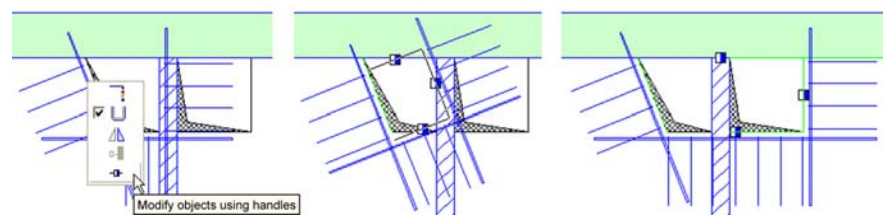
New Features in Allplan 2003

- ▶ A much larger number of parameterized FF reinforcement components are now available.



New Features in Allplan 2004

- ▶ The new DIN 1045-1 and the new mesh types, diameters, and concrete qualities are now implemented in all reinforcement modules.
- ▶ Automatic dimensioning of the shell and reinforcement is available for newly created sections.
- ▶ The newly integrated punching shear analysis from HALFEN-DEHA takes account of the automatic increase of the required longitudinal reinforcement.



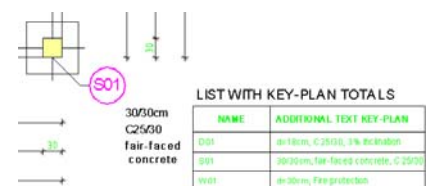
New in Allplan 2006: Handles for manually entering the FF reinforcement

New Features in Allplan 2005

- ▶ The hook definition in the steel-saving DIN 1045-1 auto area reinforcement enables easy anchorage detailing and reduces slab edge reinforcement by allowing free forms.
- ▶ New, flexible overlap variants for mesh reinforcement save positions.
- ▶ Schema and bending shape representations in the lists are now even easier to read.
- ▶ Automatic reinforcement is now possible using 2D shell designs and the FF components.

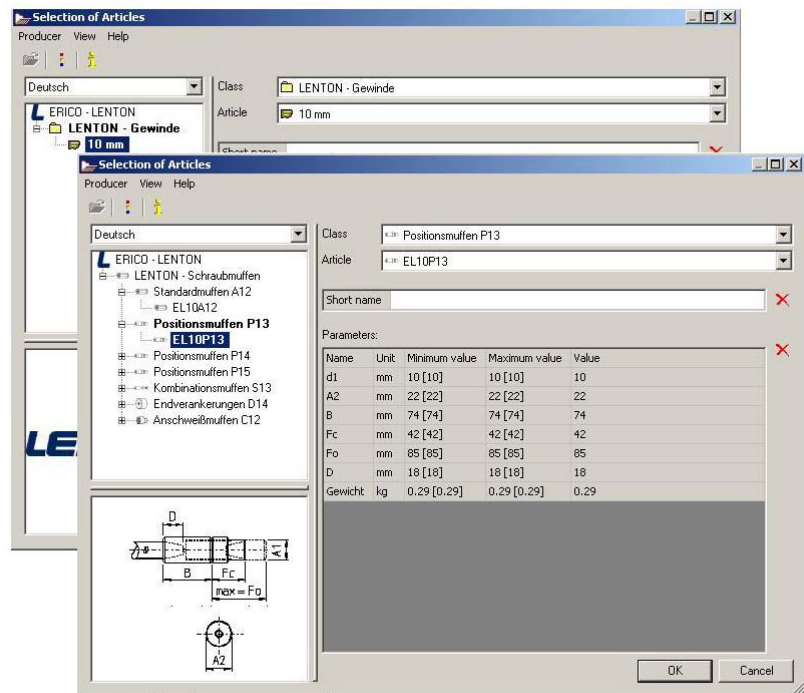
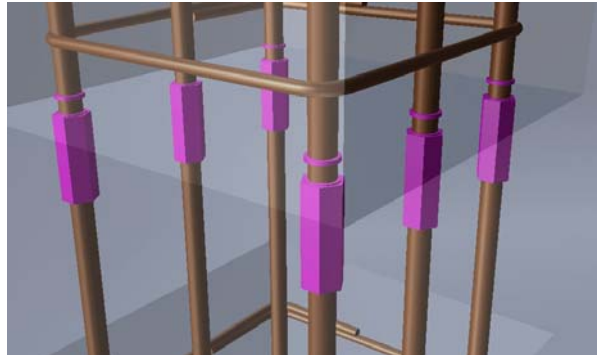
New Features in Allplan 2006

- ▶ The fixtures now have visibility control and can be arranged along elements.
- ▶ Lists of structural positions and intelligent additional text are now possible for the key-plans.
- ▶ FF reinforcement can now be entered more efficiently using handles for entering bending shapes and components.
- ▶ The layout of reinforcement drawings has been further improved: All text in Arial, improved dimension line type leader.
- ▶ Allplan now provides color coding for the number-off checking.
- ▶ Bending radii are now retained for all bar modifications.
- ▶ The lengths of the mesh reinforcement are now also output in mm.
- ▶ The reinforcement schedules have been optimized: Building lists for reinforcement, angle dimensioning in bending schedules, and continuous page numbering.



New in Allplan 2006: Lists of positions

- ▶ 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 allows you place anchoring plates and bolts, punching reinforcement, column, wall, and joist hangers from article catalogs.



New in Allplan 2006: ERICO-LENTON screw connections for reinforcement

Round-trip Engineering

New Features in Allplan 2003

- ▶ During import of the reinforcement proposals from the F+L structural analysis programs, Allplan automatically optimizes the design layout.

New Features in Allplan 2004

- ▶ The structural analysis according to DIN 1045-1 can be started directly by clicking the relevant component in Allplan.
- ▶ Allplan automatically transfers the component geometry, support conditions, and dead weights to the F+L FEA programs.

New Features in Allplan 2005

- ▶ Integrated and very flexible FEA calculations for plates and slabs using the F+L FEA programs in Allplan.
- ▶ If required, Allplan can illustrate the results from the F+L FEA modules.
- ▶ With the SCIA 3D FEA structural analysis software, you can analyse 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 slabs.

New Features in Allplan 2006

- ▶ Optimized interface to the labs PLT and Plate SC7 modules from Friedrich + Lochner through the direct creation and sending of input files, option of importing drawing files and DXF files.
- ▶ Improved SCIA interface.

Civil Engineering

New Features in Allplan 2003

- ▶ You can now model even the largest terrain with up to 100,000 mesh points.

New Features in Allplan 2004

- ▶ Specific improvements have been made to make the creation and evaluation of a terrain model even more user-friendly.
- ▶ Engineering structures and earthworks can now be designed parametrically and visualized.
- ▶ Using the new turning circle module, you can check tight road details or plan for example the delivery using articulated lorries.

New Features in Allplan 2005

- ▶ You can now create roundabout systems with multiple junctions more quickly and easily.
- ▶ For a complex road, cadastral, 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 data (manholes, sewers, water, gas) into Allplan via Excel to effectively supplement your designs.

Collaboration/Administration

New Features in Allplan 2003

- ▶ The new Nemetschek license management feature ensures licenses are used more effectively.

New Features in Allplan 2004

- ▶ During team project work, you can now remove and integrate computers into the network at any time.

New Features in Allplan 2005

- ▶ Designs of any size can now be generated 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, among other things, parallel installation and data transfer.
- ▶ Service releases can now be installed automatically.
- ▶ When the license server is used, a mobile computer no longer needs a dongle for "borrowing" licenses.

New Features in Allplan 2006

- ▶ With multi-layout import for DWG and DXF files, 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 file sets during import and export in Allplan.
- ▶ The resolution of pixel images, color gradients, and OLE objects can now be configured during PDF export.