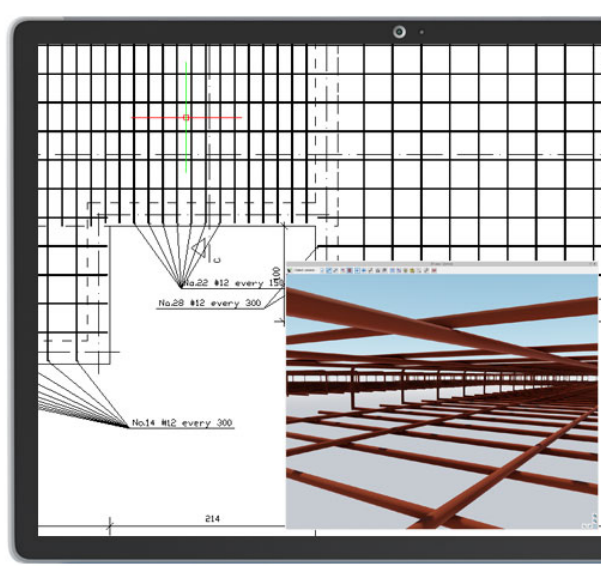


## ArCADia REINFORCED CONCRETE SLAB

Maximum support in detailed structural drawings of reinforced concrete slabs.



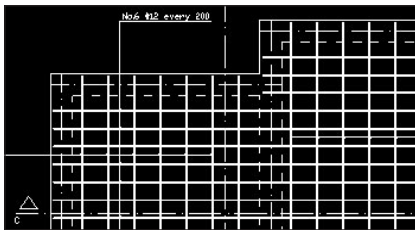
This module is intended for construction engineers to provide maximum support to the user in developing detailed structural drawings of reinforced concrete slabs in a CAD program.

The module creates a spatial model of the slab's reinforcement, allowing further editing and the automatic creation of new slab cross-sections. Based on the data entered by the user, in the form of views of the slab's top and bottom reinforcement plates and the element's cross-sections.

This module expands the capabilities of the ArCADia BIM program with advanced functions, which means that part of the building modelling options are available in the ArCADia BIM program:

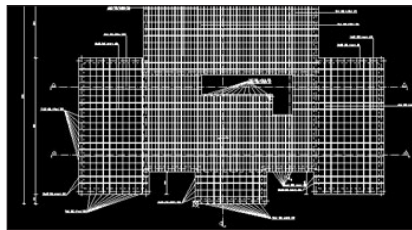
**ArCADia LT, ArCADia, ArCADia PLUS**

### Advanced features of The ArCADia-REINFORCED CONCRETE SLAB module:



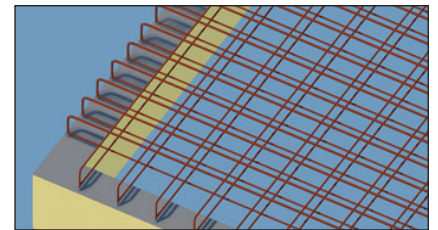
GEOMETRY:

- Ability to design multiple slabs within one document.
- Ability to transfer the ceilings including their support conditions from the building's model in the ArCADia-ARCHITECTURE program.
- Ability to build the geometry and reinforcement plate of the slab in two main views defined separately for the top and bottom reinforcement plates.
- Free panning and adding of new slab cross-sections as well as setting the depth of field of cross-section reinforcement.
- Ability to freely shape the slab's contours and openings as well as adding supports in the form of: walls, columns and binding joists.



REINFORCEMENT:

- Automatic inclusion of rectangular reinforcement grids for any given shape of the slab or its fragment while maintaining a uniform or altering grid reinforcement in both directions as well as the maintenance of the vertical cover (top and bottom) and side cover for all grid bars.
- Automatic inclusion of rectangular reinforcement grids for the user-defined area inside the rectangular or any other shape slab.
- The ability to copy defined grids between the bottom and top surface of the slab.
- Ability to bend the bars from the top grid to the bottom grid.
- Ability to introduce regular densities of the reinforcement in both directions in the selected area of the given grid and to make a copy.
- Ability to introduce a cut-out of any shape in the predetermined grid.
- Ability to modify the grid's contours and separating it into individual bars.
- Ability to add single bars to the grid in the main or secondary direction
- Ability to copy grid bars
- Ability to modify the length of single grid bars
- Ability to move the entire distribution of the bars in the grid
- Automatic removal of the distribution of excess grid bars based entirely on the slab's support area (walls and binding joists).
- Ability to establish vertical punch fittings in the areas of direct slab support on columns.



OTHER:

- Automatic inclusion in the list of reinforcement steel of the regular distribution of the top grid's support tables.
- Automatic inclusion in the list of reinforcement steel of the regular distribution of the top grid's support tables.
- Dimensioning of the reinforcement in millimetres or centimetres with the ability to set the accuracy.
- Automatic inclusion of the necessary radiuses of reinforcement bar bending.
- Ability to create reinforcement bars of any shape.
- Ability to modify the diameters and properties of reinforcement bars.
- Automatic removal of reinforcement bars, including their dimensioning and description
- Ability to insert an aggregated numbering of the slab's reinforcement bars and their descriptions for bars with a regular increase in the bar's length.
- Free insertion of reinforcement descriptions to element views and cross-sections.
- Automatic continuous numbering of all bars within one document or for one slab.
- Ability to freely shape the dimensioning of the slab's geometry.
- Automatic creation and modification of the list of reinforcement steel based on the created reinforcement model (list for a single slab or list for the entire drawing).
- Preview of the designed slab reinforcement model in a 3D view.

