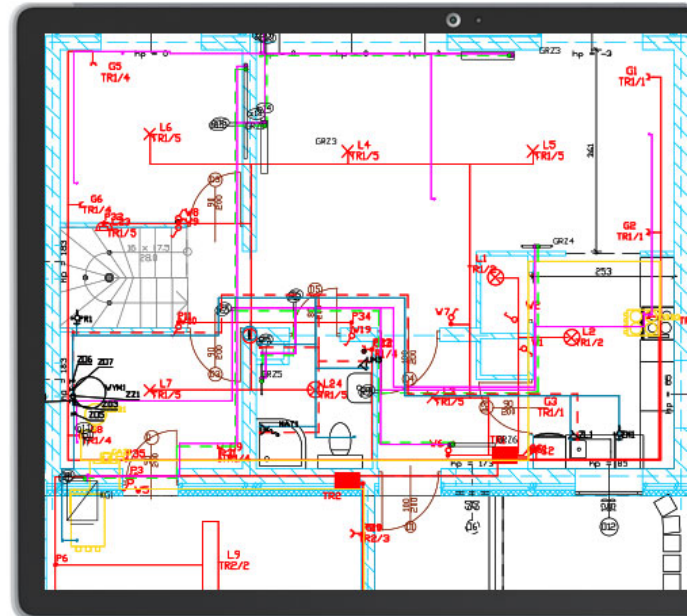# ArCADia

Work in a CAD environment using BIM tools. Object drawing, quick documentation creation.

Software based on a well-known and developed for many years CAD platform, which guarantees full compliance with the DWG format.

The first Polish software for the construction industry allowing the designer to work in accordance with BIM technology.

Software that uses many solutions that significantly accelerate design work in the construction industry. By using objects such as a multi-layer wall, doors or windows, the user can quickly create CAD drawings, without losing anything from the full compatibility of the project with the DWG format.

The ArCADia program ends Autodesk's monopoly on the market of CAD programs, bringing to an end unjustified overpricing and proving that a program with high quality and functionality can be available at a price which is corresponding to the capabilities of each designer.

ArCADia software FEATURES:

- Support BIM technology, object-oriented architectural design.
- Ready-made architectural elements: multilayer walls, stairs, bases, columns, chimneys, windows and doors.
- Comparing and merging documents.
- Automatic floor entry, additional support for Teriva floor design.
- Drawing of flat and spatial technical documentation and its writing to the native dwg format characteristic of most CAD applications.
- Work on layered drawing with the ability to use groups, blocks, external references and raster backdrops.
- Precise drawing with the ability to use Cartesian and polar coordinates, characteristic points and tracking.
- Work on a real-world model and the ability to print at any scale from a specified sheet of paper.
- Generating statements.
- Supporting the IFC format. A possibility to exchange design data with other programs.
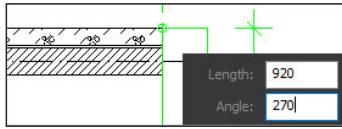
Included FEATURES:

- BIM FEATURES
- ADVANCED DRAWING TOOLS

BIM FEATURES
BASIC TOOLS | ARCHITECTURE | CONSTRUCTION | WATER INSTALLATIONS | SEWAGE INSTALLATIONS | GAS INSTALLATIONS | HEATING INSTALLATIONS ELECTRICAL INSTALLATIONS | COMMMUNICATION
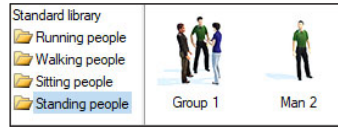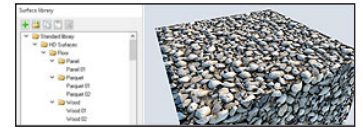
BIM FEATURES - BASIC TOOLS

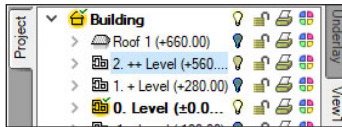**New option of inserting a single wall by an edge.**

Tutorial videos available at command icons.

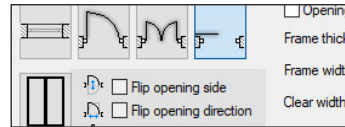**Animated object library, sun animation and scene cloud cover selection, saving project tour in the mp4 format.**

PBR texture library.

Project Manager tree
Managing views and the displayed information through the clear tree of the Project Manager.

Walls, windows, doors
Inserting elements such as wall, pipe, etc. using the smart tracking function.

Visualization
Showing elements drawn in the view in a classic or the new 3D view rendered in real time (visualization using a 3D game engine).
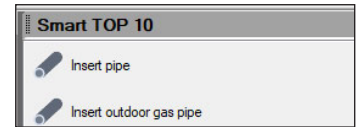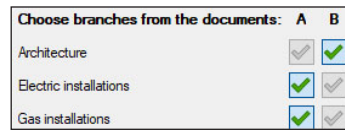

Smart TOP 10
A smart list of the most often used commands that are automatically memorized when working on a project, creating a personalized tool palette.
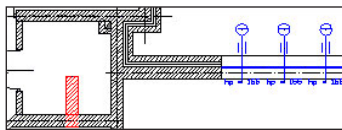
Comparing
The possibility to compare two versions of a project created as an ArCADia system model in the scope of new and modified system elements.
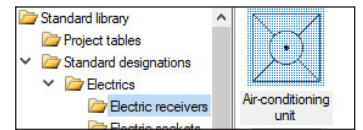

Merging
The possibility to merge the building model from an architectural design with the installation design models to create one complete model of a building project.
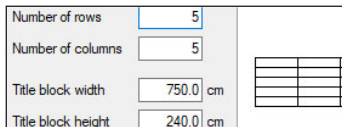

Collision
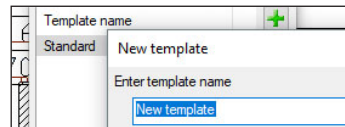Collisions list of all or individual ArCADia system elements on a view, 3D view and a clear list.

Library
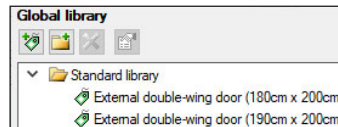Built-in library that allows for detailing with 2D symbols and 3D objects needed in the drawing.

Drawing tables
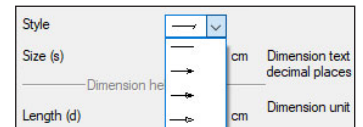Creating and inserting drawing tables with the option of saving them to the program library.

Custom setting
Saving custom settings for elements (pens, fonts, default element sizes, etc.) in the project template.
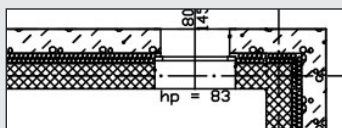

Elements
Built-in library of all elements types, with the possibility of expansion.

Dimensioning
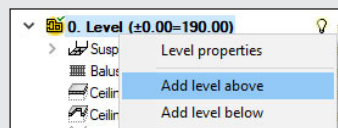Possibility of entering linear and angular dimensioning.
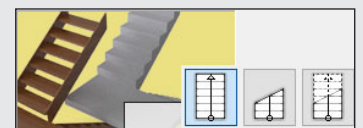
BIM FEATURES - ARCHITECTURE

Choice of defined or drawing any multilayer wall. Built-in catalogue of construction materials.

Inserting of window and door woodwork in a parametric way. Inserting woodwork.


Automatic creation of rooms from the closed outlines of walls and virtual walls, assigning names, functions, temperature and lighting demand.


Defining one- and multi-flight stairs and winder stairs in any view.

ArCADia SOFT

BIM FEATURES
BASIC TOOLS | ARCHITECTURE | CONSTRUCTION | WATER INSTALLATIONS | SEWAGE INSTALLATIONS | GAS INSTALLATIONS | HEATING INSTALLATIONS ELECTRICAL INSTALLATIONS | COMMMUNICATION
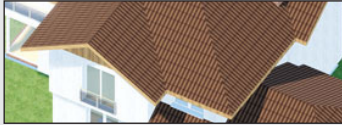
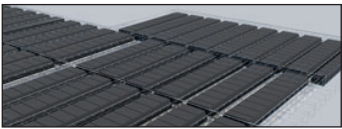Inserting an automatic roof on the closed external walls contour. Inserting of roof windows and dormer windows.
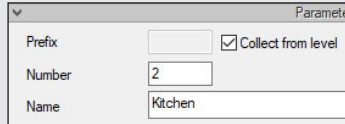
Creating a level with the possibility of copying selected elements.

Inserting automatic ceilings on the closed external walls contour.

>> MORE FUNCTIONS

BIM FEATURES - CONSTRUCTION

Constructing the structural systems of Teriva ribbed-beam roofs, containing all the basic elements of the system: ceiling beams, reinforcing ribs, hidden ribs, exchanges, supporting mesh and additionally all necessary material lists including the elements needed to make the ceiling, completed with reinforcing steel and monolithic concrete .
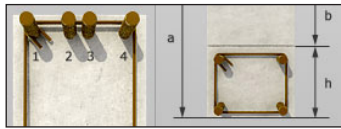
Inserting the binding joist with the insertion of longitudinal reinforcement and stirrups.
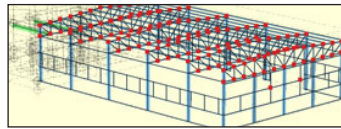

Transferring the location and the material as well as the bar cross-section to the construction view. Passing the remaining elements of the architectural model in the form of a rendered or translucent 3D view, and in the case of modular axes, bar elements and surface elements also in the form of their active underlay.
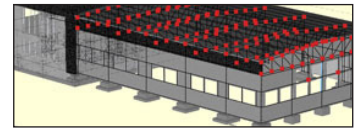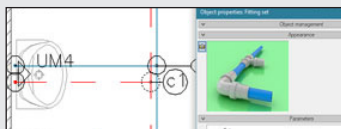

Automatic 3D construction view created on the basis of a three-dimensional architectural model of a building.
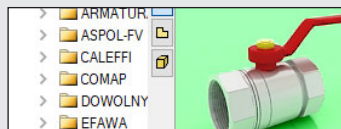
>> MORE FUNCTIONS

## BIM FEATURES - WATER SUPPLY INSTALLATIONS
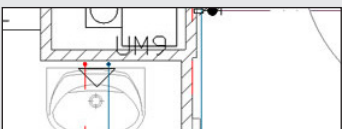
Drawings of the internal water supply system | connection point | water meter set | pipelines.

Automatic generation of connection fittings, creation of point numbering and installation description. Creating own templates.

Inserting fittings and devices from the manufacturers' library. Inserting devices with individually set shapes and dimensions defined by the user (eg DHW heaters). Inserting into the program library typical element systems.
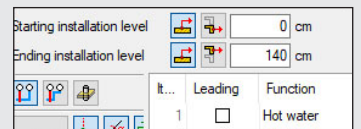
Applying risers and distribution pipes from a library. It is possible to simultaneously run several parallel conduits with different functions and connect them intelligently. Drawing simplifications that allow you to change the level of many elements of the installation at the same time.

Checking the installation for connections correctness.

Generating ready-made materials lists, devices and connection fittings included in the project.
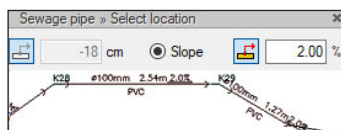
>> MORE FUNCTIONS

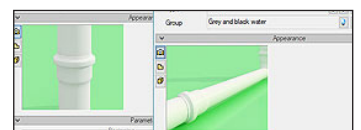## BIM FEATURES - SEWAGE INSTALLATIONS

3D installation preview, which facilitates the correcting of irregularities in the pipeline route not shown on the view.

Generating ready-made materials lists, devices and connection fittings included in the project.

Entering the pipeline route of the sewage system with a given slope on the view.

Pipelines with automatic distinction between outflow channels, risers and connecting pipes for accessories.

Generating ready-made materials lists, devices and connection fittings included in the project.

Checking the installation for connections correctness.

>> MORE FUNCTIONS
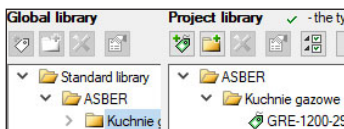
BIM FEATURES - GAS INSTALLATIONS

Drawings of the internal gas installation.

Automatic generation of a set of connection fittings.

Ready-made lists of materials and lists of elements.

Fittings and devices from the manufacturers' library.

Possibility to easily and quickly enter additional databases to the main library.

Checking the installation for connection correctness.

>> MORE FUNCTIONS

BIM FEATURES - HEATING INSTALLATIONS

Ready-made materials lists, devices and connection fittings. Lists of receivers in rooms.

Heat receivers, i.e. panel, ribbed, bathroom and channel heaters, heating pipes, air heaters and fancoil units.

Fittings and devices from the manufacturer's library.

Automatic creation of point numbering and installation descriptions. Creating own templates.
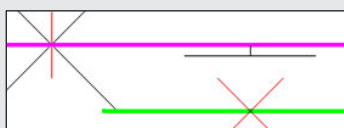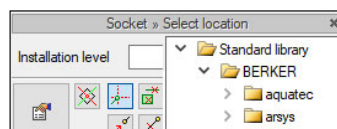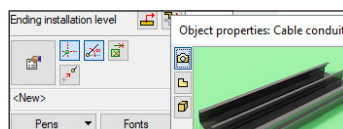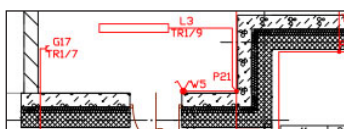

Inserting the fastening with the possibility of defining parameters characteristic for the fastening used.

Checking the installation for connection correctness.

>> MORE FUNCTIONS

BIM FEATURES - ELECTRICAL INSTALLATIONS

Drawing of internal electrical installations with distribution boards, sockets, connectors, boxes, lighting fixtures.


Designation of cable routes.

An extensive library of manufacturers catalogues of electrical installation elements.

Possibility to assign receivers to a particular distribution board (addressing).

ArCADia SOFT

BIM FEATURES
BASIC TOOLS | ARCHITECTURE | CONSTRUCTION | WATER INSTALLATIONS | SEWAGE INSTALLATIONS | GAS INSTALLATIONS | HEATING INSTALLATIONS ELECTRICAL INSTALLATIONS | COMMMUNICATION
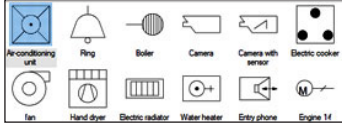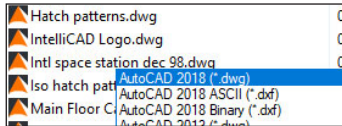
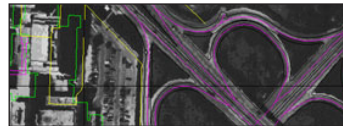Possibility to modify symbols of entered objects and assign receivers to a particular distribution board.

Generating a list of materials used in the project.

>> MORE FUNCTIONS

BIM FEATURES - COMMUNICATION

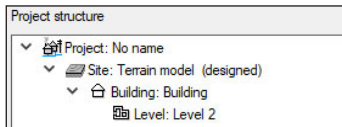AutoCAD format from 2.5 to 2018 (DWG, DXF).

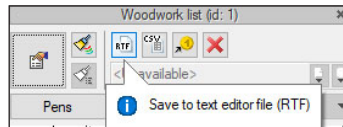Importing/editing raster images files : JPG, TIF, BMP, PNG.
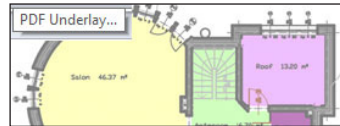
Import PDF files analogously to raster underlays or with conversion to vector elements. Export to PDF file.
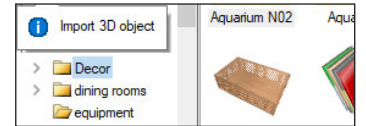
Possibility to enlarge the library of 2D / 3D objects with the formats: XOBJECT, ACO, O2C, OBJ, XOBJ3D and DWG.

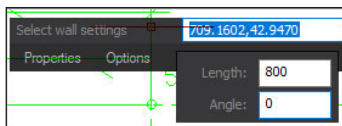IFC file conversion into ArCADia's basic objects (walls, windows, doors, ceilings, roofs).

Export of material lists of elements included in the project to RTF, CSV and to the Ceninwest program.)
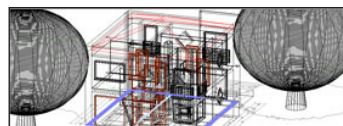
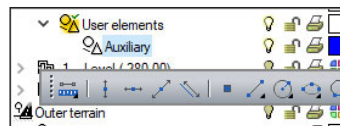## DRAWING TOOLS
An extended CAD drawing engine

ADVANCED DRAWING TOOLS
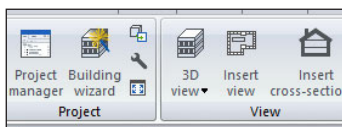

Floating data input window at cursor.

Creating a three-dimensional CAD project from ArCADia's objects (walls, pipes, cables etc.)
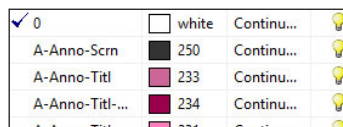

New auxiliary options placed in a special group and easily accessible from the left toolbar.
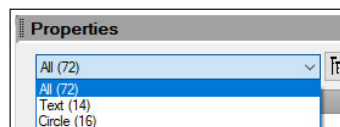

New options for measuring length, area and perimeter.
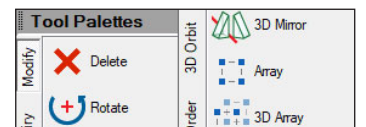

The program window is divided into tabs in which the drawings are successively displayed.

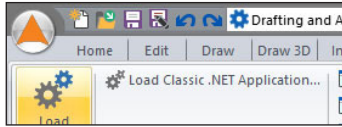Working on layers.
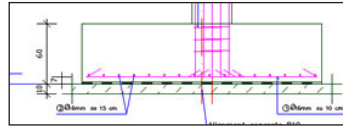Project management explorer.

Docked property panel.

Displaying tool palettes.
Dedicated Express tools toolbar.

ArCADia SOFT

DRAWING TOOLS
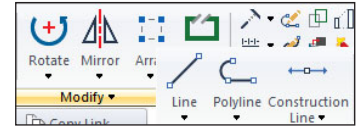## An extended CAD drawing engine

BEDROOM-2

Implemented Lisp programming language interpreter. Possibility to load SDS and IRX overlays.
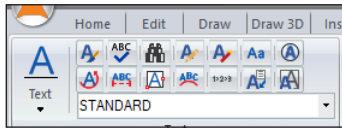
Basic tools for creating 2D and 3D drawings.

Ability to open and fully edit ACIS solids (format developed by Spatial Technology Inc.). Import and export of ACIS solids in SAT format. **Only in ArCADia PLUS.**

Possibility to fully modify and edit the properties of all drawn elements.

Entering and defining symbol libraries, blocks, simple and complex texts (SHX and TrueType fonts). Additional multiline text editor. New functions of the word editor: columns, scaling, entering text along the arc and borders, text fitting, rotation, auto numbering, etc.
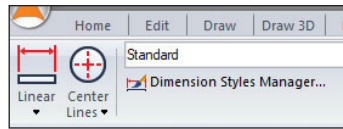
Dimensioning assigned to the element: linear and angular, the ability to define your own styles.
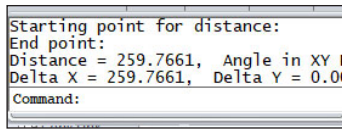
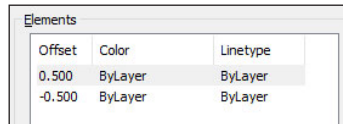Automatic field and distance measurement, setting coordinates.
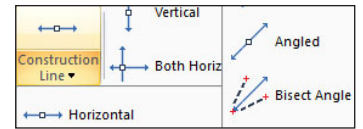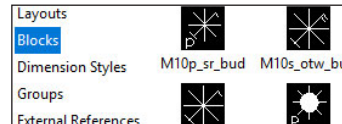
New options for construction lines.
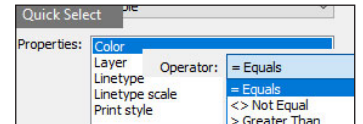
ADVANCED DRAWING TOOLS

A wide range of hatch patterns. New hatch definition and gradient fill window.
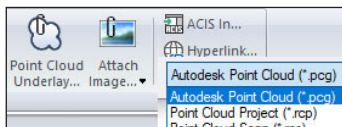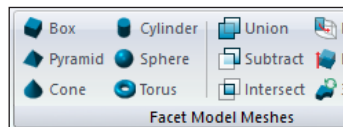
A multiline drawing option.

Enhanced block, reference and dimension support capabilities.
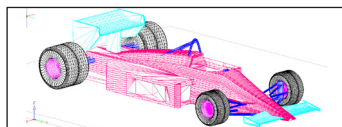
Options: Select similar (with adding to the selection and the settings window), Multiadogy, Multiline editor, Dashed line.

Possibility to add point cloud in RCP / RCS format.

New types of 3D objects (primitives) - Facet Modeler (ODA surface modeler), along with basic editing functions.
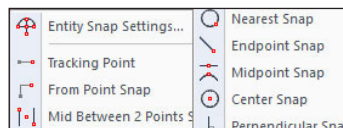
Possibility of photorealistic visualization and rendering. Drawing in hidden line mode and shading in real time.
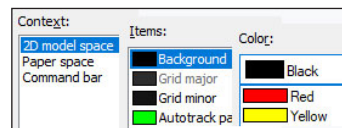
Possibility to open ACIS solids (without option to create and fully editing). DWF, DGN and DAE formats support. Export of STL files.
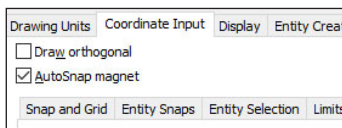
Auxiliary grid, orthogonal drawing functions, polar tracking.

Extended recognition of snap points (ESNAP), e.g. for lines - center, end points and intersections of lines.

Modification of the top menu, ribbons (panels and tabs), toolbars, command status bar and keyboard shortcuts.

Precise printing by setting all print parameters. Possibility to create a non-rectangular viewport in the paper space.