



#### **ArCADia LT**

Work in a simple CAD environment and open up to BIM technology

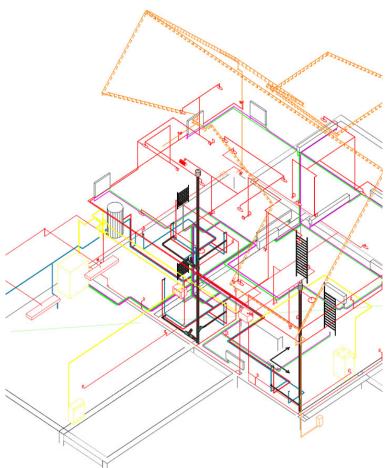
Object-oriented 2D drawing, fast documentation creation.

ArCADia BIM LT is a fully functional, easy-to-operate and intuitive CAD program that allows object-oriented creation of 2D building documentation and saving files to the 2013 DWG format.

ArCADia BIM LT opens DWG 2018 format files by automatic conversion to version 2013.

It is a basic graphic design tool for the construction industry in its broadest sense. The LT version of the program has all the basic functions of the ArCADia BIM system.





#### ArCADia BIM LT software FEATURES:

- Support BIM technology, object-oriented architectural design.
- Intelligent drawing with 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.
- · Generating statements.
- Supporting the IFC format. A possibility to exchange design data with other programs.
- Full DWG/DXF support.

#### Included FEATURES:

- BIM FEATURES
- · BASIC DRAWING TOOLS



#### **BIM FEATURES**

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

#### ArCADia BIM SYSTEM (BASIC TOOLS WHICH ARE INCLUDED IN PRICE)



A change in the program's licensing, introducing network licenses.



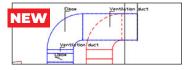
Changes in the program installation, from now on libraries of surfaces and 3D objects are downloaded as separate installations.



New version of dynamic coordinate input and a setup window for dynamic input.



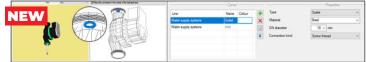
Introduced a new level of detail mainly used for installation elements.



Changes in creating a level view to facilitate the drawing of installations.



Expanded element description options.



Option of inserting system objects (devices, fittings) with a user-defined 3D view (based on .dwg .3Ds, .obj., .O2c, .rvt and .rfa files). The element defined in this way can be connected to the installation being designed in the program through the function of editing the location of connectors.



Tutorial videos available at command icons.



Expanded element description options.



PBR texture library.



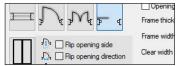
**Smart TOP 10** 

A smart list of the most often used commands that are automatically memorized when working on a project, creating a personalized tool palette.



#### **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.



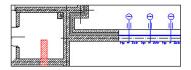
#### Visualization

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



#### Library

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



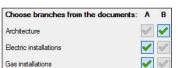
#### Comparing

The possibility to compare two versions of a project created as an Ar-CADia system model in the scope of new and modified system elements.



#### Drawing tables

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



#### 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.



#### Custom setting

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



#### Collision

Collisions list of all or individual Ar-CADia system elements on a view, 3D view and a clear list.



#### Elements

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



#### Dimensioning

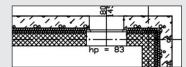
Possibility of entering linear and angular dimensioning.



**BIM FEATURES** 

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#### **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.



and winder stairs in any view.



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.

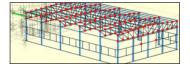
#### CONSTRUCTION



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.

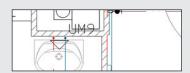


Transferring the location and the material as well as the bar cross-section to the construction view. Passing the remaining elements of the architectural model in the form of a rendered or translucent 3D view, and in the case of modular axes, bar elements and surface elements also in the form of their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



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

#### WATER SUPPLY INSTALLATIONS



Drawings of the internal water supply system | connection point | water meter set | pipelines.

Δ		PS1	Level 1	Incorrectly connec
8	Q	PS1	Level 1	Unconnected pipe
$\mathbf{\Lambda}$	Q	PS1	Level 1	Incorrectly connect
8	Q	PS1	Level 1	Unconnected pipe
	0	DC1	Level 1	Unanamental since

Checking the installation for connections correctness.



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

Creating own templates.

•	Shut-off valve
$\Diamond$	Sink faucet
بلساح	0.0000000000000000000000000000000000000

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



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.

Starting installation level		<del>-</del>	0	cm
Ending installation level	4	<b>3</b> →	140	cm
1 P 4	lt	Leading	Fund Hot v	

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.



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#### **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





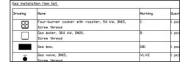


Checking the installation for connections correctness.

#### **GAS INSTALLATIONS**

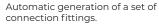






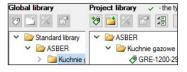


Drawings of the internal gas installation.



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.

#### **HEATING INSTALLATIONS**

Room number	Room name	Room temperature til (*C)	Receiver power [V]	Type/Series of type
Level 2		*******		
Ungrouped				
5	Bathroom	24.0	506	Leros LERIZOGA
10	Room	20.0	750	typ 20
2	Room	0.05	900	typ 21
	Room	26.0	2500	

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



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



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

		Installati	Location	Description
0	Q	KPS1	Level 0	The installation de
$\Lambda$	Q		Level 0	Unconnected pipe
A	Q		Level 0	Unconnected pipe

Checking the installation for connection correctness.



Fittings and devices from the manufacturer's library.



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

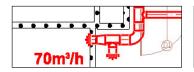




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#### **VENTILATION SYSTEMS**





Creating drawings of the internal ventilation system - from intake/ exhaust elements, through ventilation devices (fans, heaters, fire dampers, etc.), to the end elements of the installation in the form of air inlets and outlets.



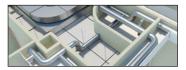
Preparation of the ventilation flow and usage report based on the object architecture (or user-defined rooms).



Inserting duct elements and fittings (made of various materials) with round, rectangular and oval cross-sections. Inserting ventilation devices from the manufacturers' library with the option of adding your own objects.

	Nu	Nazwa pomieszcz	Kubatur	Ogrzewanie	Ter
Q	13	Pom. biurowe	54.69	Wewnętrzne	
Q	1	Komunikacja	94.63	Wewnętrzne	
Q	2	Pom. biurowe	67.08	Wewnętrzne	
Q	12	Pom. biurowe	34.50	Wewnętrzne	
a	3	Pom. blurowe	46.16	Wewnetrzne	

Saving layouts made of many elements, e.g. part of the installation, to the program library, in order to reuse it. Creating descriptions and saving your own annotation templates.



Preview of the installation in 3D view, which facilitates the correction of irregularities in the route of the ducts not shown on the plan.

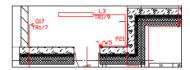
Rysunek	Nazwa	Dznaczenie	
	Anenostat	VY1 VY1 VY17-VY19	
	Centrala nawiewno-wywiewna	CVI	

Generating lists of materials and devices included in the project, intended for further processing and for the creation of cost estimates and investment valuations.

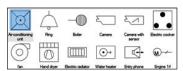
## | Type | National Class | Marie | Mari

Possibility to define any number of ventilation systems used in the project and their properties, including air parameters (in terms of temperature and relative humidity).

#### **ELECTRICAL INSTALLATIONS**



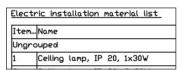
Drawing of internal electrical installations with distribution boards, sockets, connectors, boxes, lighting fixtures.



Possibility to modify symbols of entered objects and assign receivers to a particular distribution board.



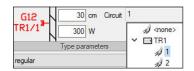
Designation of cable routes.



Generating a list of materials used in the project.



An extensive library of manufacturers catalogues of electrical installation elements.

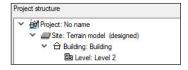


Possibility to assign receivers to a particular distribution board (addressing).

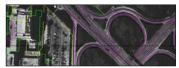
#### COMMUNICATION



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



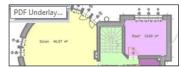
IFC file conversion into ArCADia's basic objects (walls, windows, doors, ceilings, roofs).



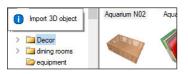
Importing/editing raster images files: JPG, TIF, BMP, PNG.



Export of material lists of elements included in the project to RTF, CSV and to the Ceninwest program.)



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



### DRAWING TOOLS An extended CAD drawing engine

# BEDROOM-2

#### **BASIC DRAWING TOOLS**



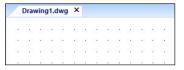
Option to clear text formatting when copying texts from other programs.



Auxiliary options (vertical, horizontal, parallel lines etc.) 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.



Editing drawing elements: moving, copying, scaling, rotating, mirroring, ordering, cutting, breaking, and offset.



Functions allowing for any hatching of a closed contour of a circle, polygon and rectangle.



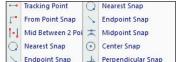
Simplified block creation and saving. Loading a block from an external file.



Creating any drawings using basic elements: lines, polylines, circles, arcs, ellipses, regular polygons and rectangles.



Auxiliary grid, orthogonal drawing functions, polar tracking.



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



Intuitive way of defining the size of the sheet and the scale of the printed drawing.



Entering and defining symbol libraries, blocks, simple and complex texts (SHX and TrueType fonts). Additional multiline text editor.