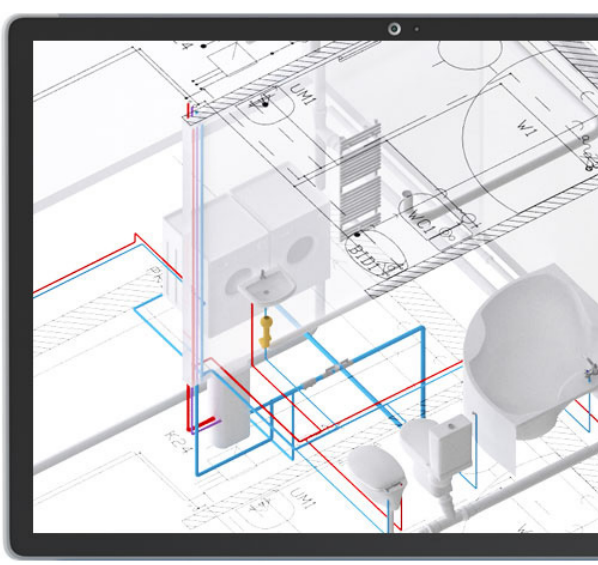


ArCADia WATER SUPPLY INSTALLATIONS

Designs of external telecommunication networks.



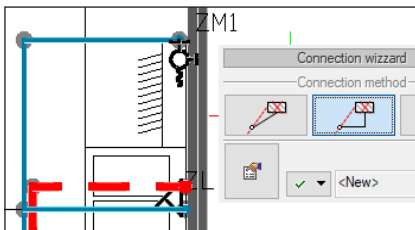
Module is intended for designers of internal sanitary installations and allows for creating the professional documentation of internal water supply installations.

Easily and quickly create drawings using automatic connections of draw-off taps with the installation. Create calculations, generate axonometric views, check correctness in terms of hydraulics and automatic selection of elements from the library.

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:

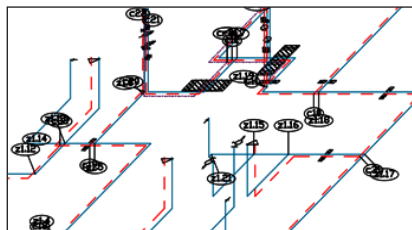
ArCADia LT, ArCADia, ArCADia PLUS

Advanced features of The ArCADia-WATER SUPPLY INSTALLATIONS module:



Automatically inserting a connection with draw-off taps in three ways.

Transforming an installation drawn with lines in a CAD environment into pipelines that are objects of the ArCADia system.



Automatic generation of three types of axonometry (also partial) with the possibility of graphic modification.

Introducing stop valves in axonometry drawing with automatic inclusion on the view and in the lists.

	Path	Total pipeline l...	Minimum require...	R4
<input checked="" type="checkbox"/>	Q PS1 - WC4	23.16	111.90	
<input type="checkbox"/>	Q PS1 - PR8	23.80	99.91	
<input type="checkbox"/>	Q PS1 - UM10	22.57	97.45	
<input type="checkbox"/>	Q PS1 - ZM5	26.19	95.42	
<input type="checkbox"/>	Q PS1 - ZL6	25.27	94.77	
Sum of line pressure ...		18.91	79.10	98.0
Sum of local pressur...				
Sum of pressure loss...				

Calculation of pressure loss for all or selected water flow paths, selection of the most unfavourably located water intake point.

Calculation of heat losses and pressure losses in circulation systems with the possibility of determining the required lift height and efficiency parameters for circulation pumps.

Inclusion in the calculation of hydraulic conditions for installations with fire hydrants.

Initial parameters		Residential building							
Building application:		Residential building							
Minimum available pressure in PSI:		35.0 m H ₂ O							
Maximum available pressure in PSI:		60.0 m H ₂ O							
Maximum pressure for installation:		60.0 m H ₂ O							
Design cold water temperature:		10 °C (283 K)							
Pressure required for WC4:		12.2 m H ₂ O							
Geometric height WC4:		1.7 m							
Section	Σh_p [m ³ ·s ⁻¹]	q _{hd} [m ³ ·s ⁻¹]	Pipe dimension [mm]	v [m/s]	and [m H ₂ O·s ⁻¹]	L [m]	h _{fr} [m H ₂ O]	h _{st} [m H ₂ O]	h _{tr} [m H ₂ O]
Cold water									
WC4 - z1.1	0.80	0.92	20.0x3.40	6.74	3808.90	0.68	2577.60	7174.45	9752.06
z1.1 - z1.2	0.80	0.92	25.0x4.20	4.26	1232.65	0.42	521.11	462.66	983.77

Automatic selection of system components including the applicable regulations.

Generating calculation reports.