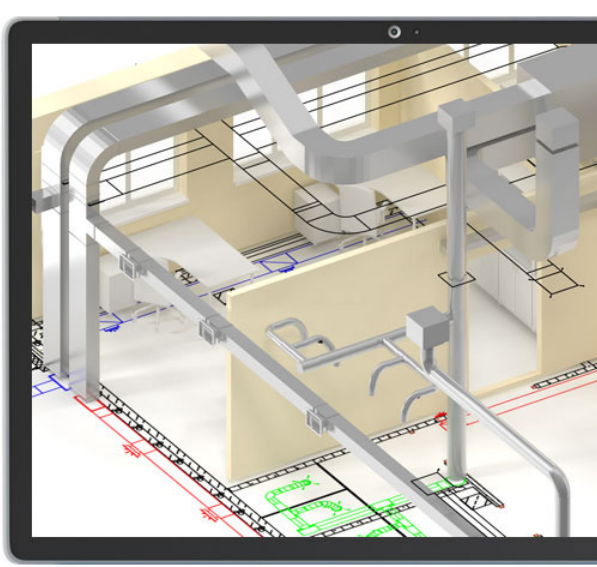


ArCADia VENTILATION SYSTEMS

Professional technical documentation of internal ventilation system in a building

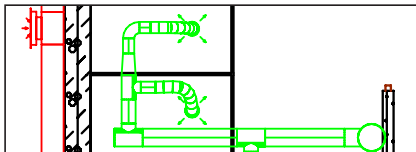


This module is intended for designers of ventilation installations as well as for all people involved in the sanitary and installation industry in construction.

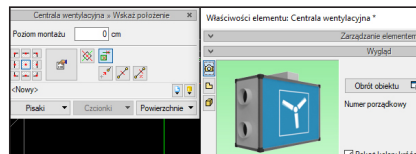
The ArCADia VENTILATION SYSTEM module allows you to create object-oriented drawings of the internal mechanical ventilation installation on architectural projections of a building, while creating calculation schemes. The program gives you the possibility to define channels, insert and edit ventilation devices. It provides access to a library of elements used in ventilation systems, which can be expanded and adapted to your own needs in terms of devices used and types of duct materials.

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:

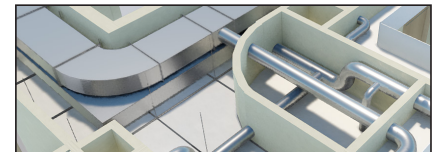
ArCADia LT, ArCADia, ArCADia PLUS



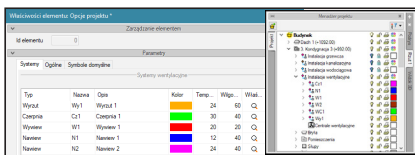
Creating drawings of the internal ventilation system - from intake/exhaust elements, through ventilation devices (fans, heaters, fire dampers, etc.), to the end elements of the installation in the form of air inlets and outlets.



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.



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

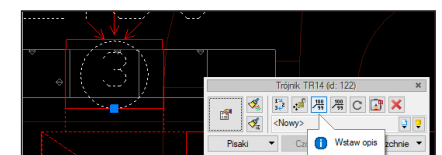


Possibility to define any number of ventilation systems used in the project and their properties, including air parameters (in terms of temperature and relative humidity).

Menadżer pomieszczeń

Nr.	Nazwa pomieszczenia	Kubatur.	Ogrzewanie	Temp.	Obciążenie	Wzrost w.	Śred. pow.	Wstaw.
Q1	Pom. biurowe	54.03	Wiewigotnie	20.0	0	2.2	120.0	W
Q2	Pom. biurowe	87.00	Wiewigotnie	20.0	0	2.0	136.2	W
Q12	Pom. biurowe	34.50	Wiewigotnie	20.0	0	2.0	69.0	W
Q3	Pom. biurowe	46.16	Wiewigotnie	20.0	0	2.0	92.3	W

Preparation of the ventilation flow and usage report based on the object architecture (or user-defined rooms). User-assumed required flow values ventilation air may remain automatically assigned and updated in air supply elements /located in the rooms' data .

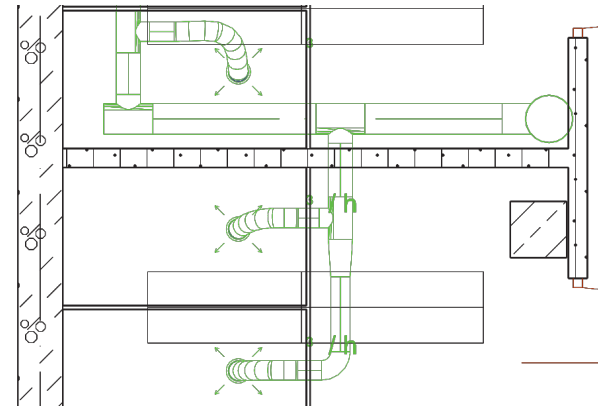


Saving layouts made of many elements, e.g. part of the installation, to the program library, in order to reuse it. Creating descriptions and saving your own annotation templates.

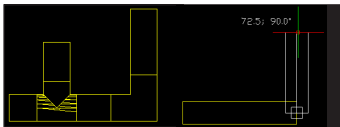
Wykaz elementów instalacji wentylacyjnej

Rysunek	Nazwa	Oznaczenie	Ilość
	Aneostat	WY1 WY1 WY17-WY19	5 szt.
	Centrala nawiewno-wyiewna	CV1	1 szt.
	Czerpnia ścienna	CZ2 CZ3	2 szt.

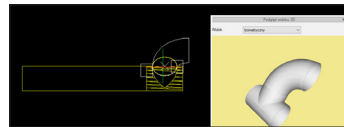
Generating lists of materials and devices included in the project, intended for further processing and for the creation of cost estimates and investment valuations.



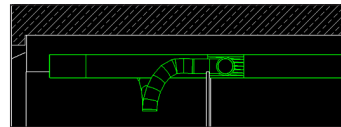
Advanced features of The ArCADia-HEATING INSTALLATIONS module:



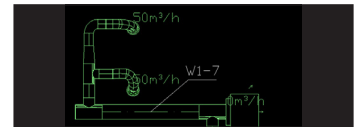
Running a network of ventilation ducts made of various materials with the function of automatically generating elbows and tees when connecting ducts.



Możliwość automatycznego dopasowania wymiarów wstawianych kanałów i kształtek do obiektów już znajdujących się na rysunku.



Automatic creation of the installation description and point numbering with the possibility of editing and creating your own templates.



Option to automatically adjust the dimensions of ducts and fittings being inserted to the objects already in the drawing.

№	№2	№1	№2	№1	№2
1	2	3	4	5	6
7	8	9	10	11	12

Calculation of total and partial pressure loss for all or selected air flow paths, selection of the path with the highest pressure loss. Calculation of the acoustic power level for all or selected airflow paths in the middle octave bands of 63-8000 Hz. Checking the ventilation air balance in the entire building and in individual systems, and meeting the condition of ensuring the available pressure in the installation.

№	№2	№1	№2	№1	№2
1	2	3	4	5	6
7	8	9	10	11	12

Calculation of total and partial pressure loss for all or selected air flow paths, selection of the path with the highest pressure loss. Calculation of the acoustic power level for all or selected airflow paths in the middle octave bands of 63-8000 Hz. Checking the ventilation air balance in the entire building and in individual systems, and meeting the condition of ensuring the available pressure in the installation.

Opis
Wydajność układu: 70 m³/h od wydajności założonej na centrali wentylacyjnej. Różnica wynosi 3775 m³/h.
Wydajność układu: 15 m³/h od wydajności założonej na wentylatorze. Różnica wynosi 2 m³/h.
W pomieszczeniu: Komunikacja nie ma zaprogramowanej wentylacji.
W pomieszczeniu: Pom. magazynowe nie ma zaprogramowanej wentylacji.
W pomieszczeniu: Pom. magazynowe nie ma zaprogramowanej wentylacji.
W pomieszczeniu: Kuchnia nie ma zaprogramowanej wentylacji.
W pomieszczeniu: Pom. usługowe nie ma zaprogramowanej wentylacji.
W pomieszczeniu: Pom. magazynowe nie ma zaprogramowanej wentylacji.

Automatic generation of building cross-sections together with installations.

Raport strat ciśnienia									
Główny CWL-NA26									
Całkowita przepływność powietrza: 100 m³/h									
Całkowita przepływność powietrza: 100 m³/h									
№	Opis	Przepływ	Strata	Strata	Strata	Strata	Strata	Strata	Strata
№	Opis	Przepływ	Strata	Strata	Strata	Strata	Strata	Strata	Strata
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

Generating reports on the performed calculations containing summaries of pressure losses and acoustic power levels on individual sections of the installation. Generating ready-made lists of materials and devices included in the project, intended for further processing and the creation of cost estimates and investment valuations.

