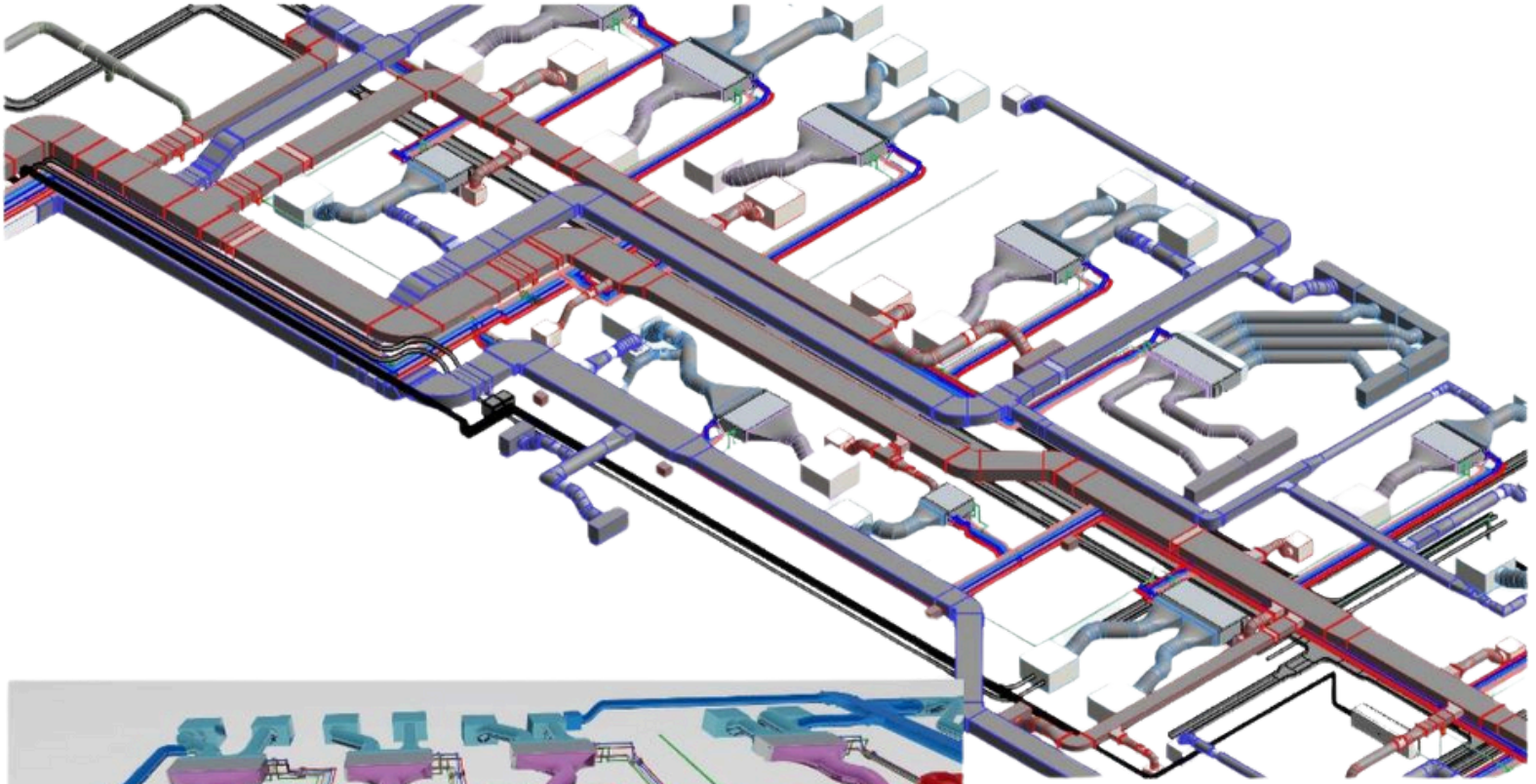
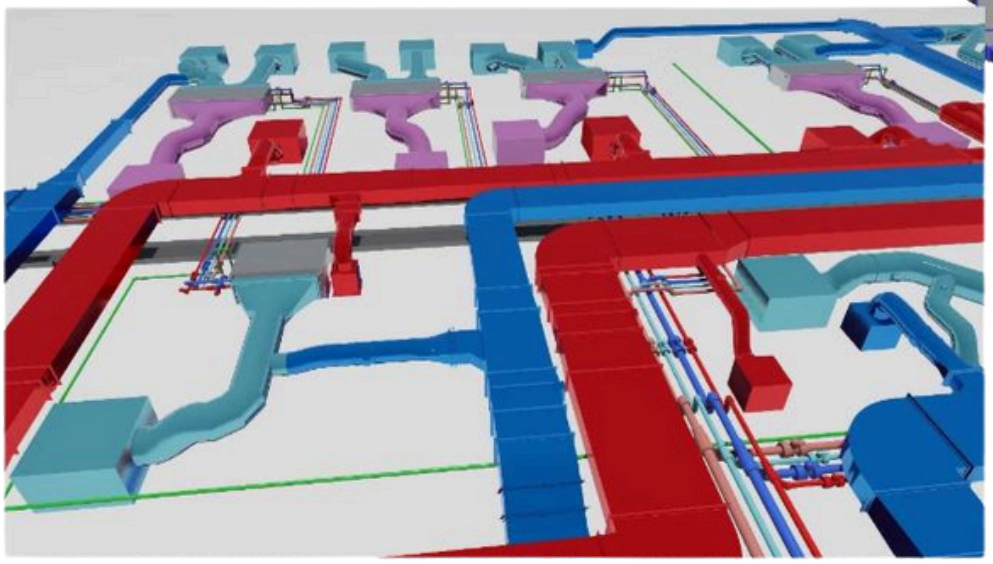
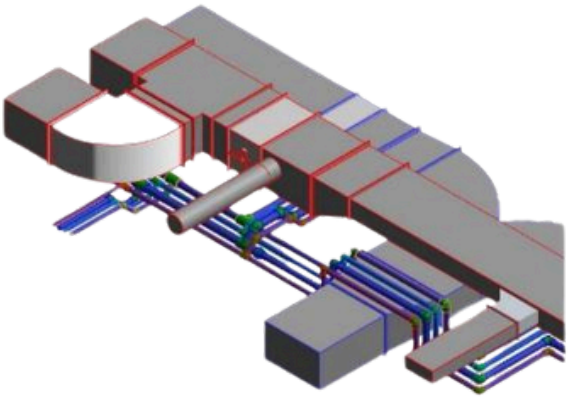
Bim & Revit Through Our Extended Engineering Network

InfraTech

We provide Revit and BIM services through our extended network of engineering experts, trusted for their precision, speed, and real-world project experience.







Founded in 2003 with the vision of leading the construction sector through the implementation of innovation in mechanical engineering, we have consistently pursued our commitment to be at the forefront of innovations by combining our background in MEP with a passion for BIM. Since 2017, we have gradually developed expertise through the implementation of the BIM methodology in our projects, enabling us to deliver high-quality BIM models across a wide range of industries.

EXPERTISE

- Mechanical (HVAC)
- Electrical engineering
- Plumbing engineering
- System automation
- Building information modeling (BIM)

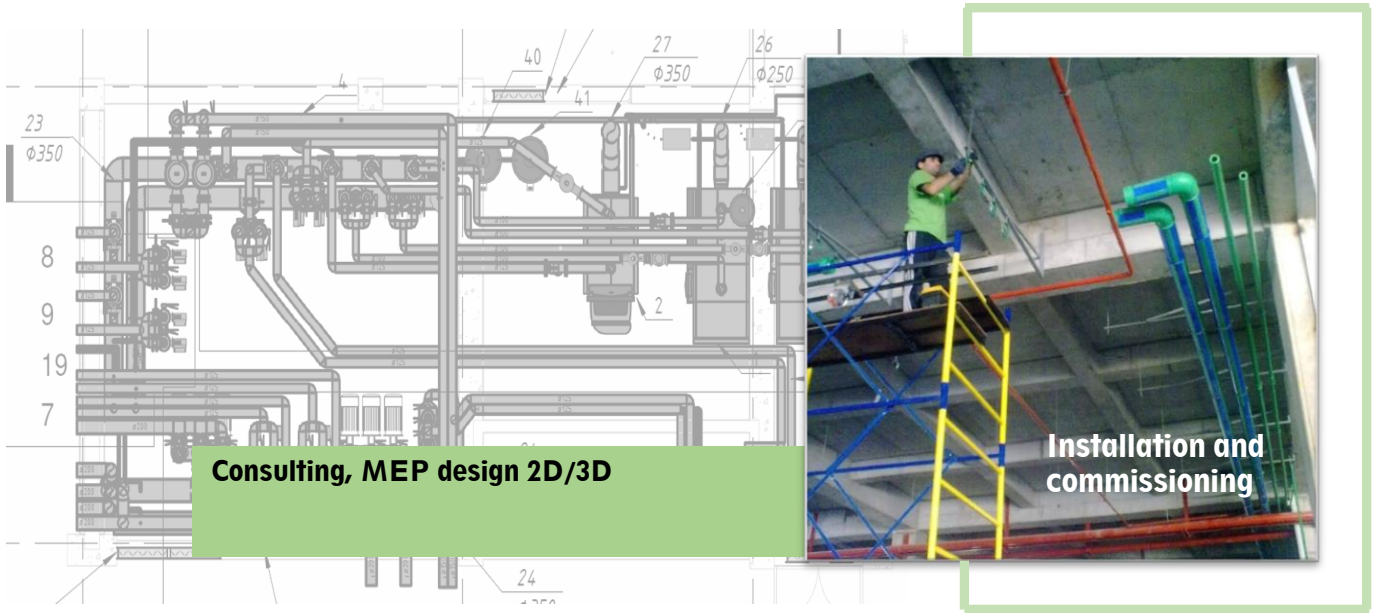
BACKGROUND

Company was founded in 2003

EXPERTISE

Heating, Ventilation, Air conditioning, Plumbing

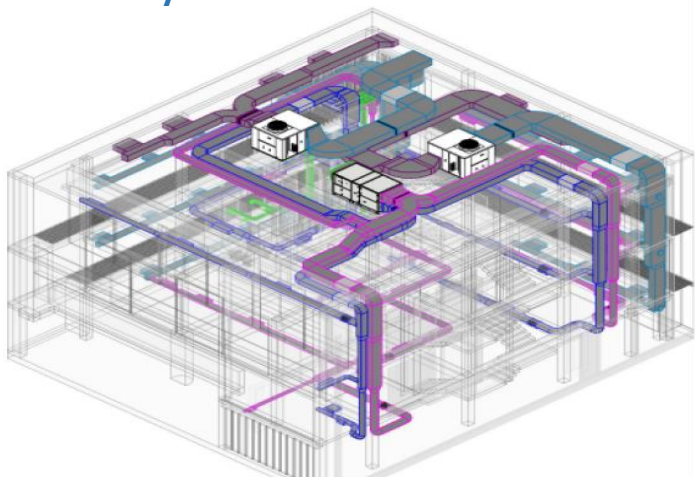
Services

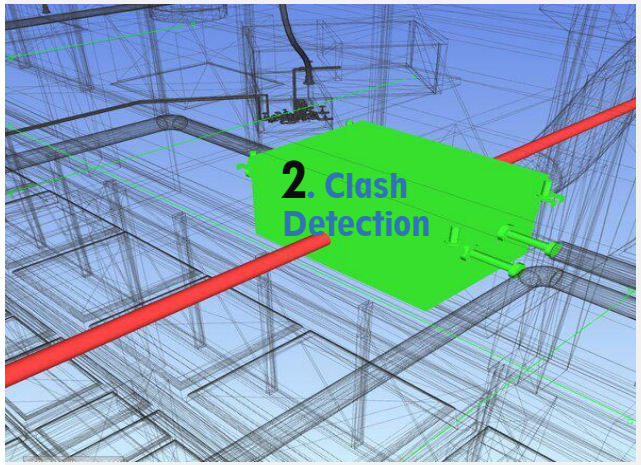


HVAC design, installation PROJECTS

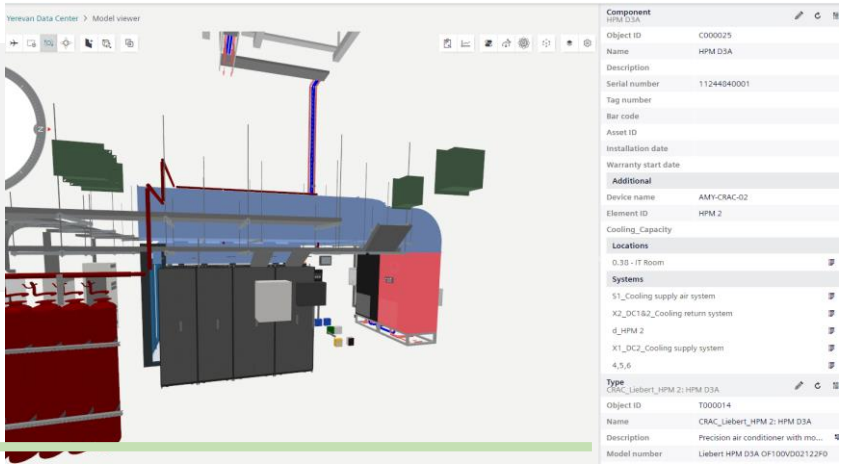
BIM SERVICES

1. BIM modeling & coordination of MEP systems





3. Digital Twin
for maintenance and operation

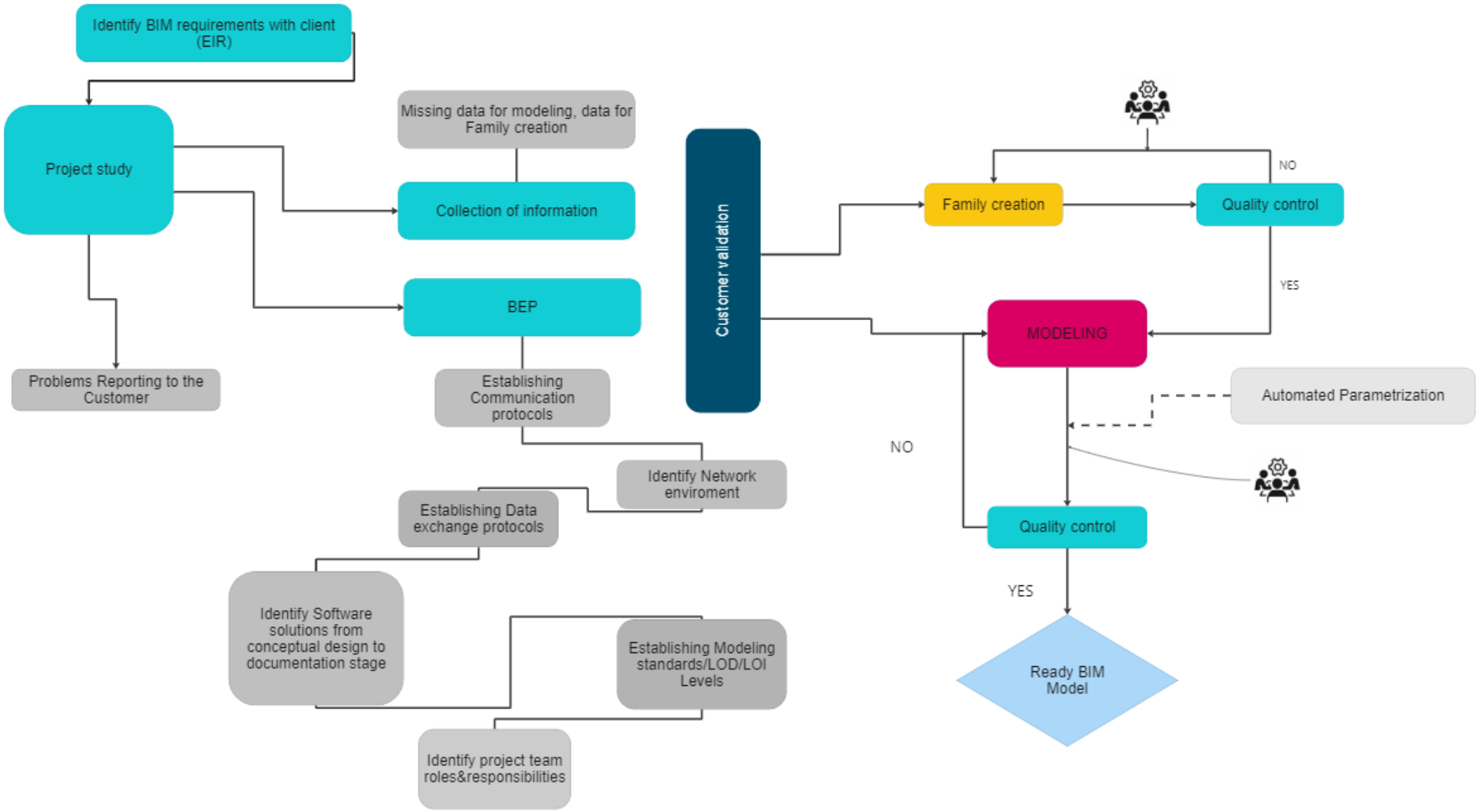


2. Augmented reality (AR).

AR in pre-construction and construction stages for site monitoring.

GAMMA AR
BIM POWERED CONSTRUCTION & BUILDING MANAGEMENT

PROCESS MAP

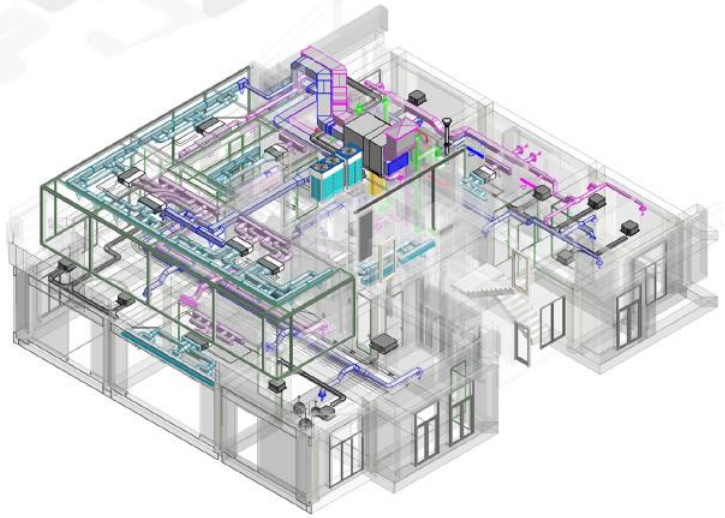

Identify BIM requirements with client (EIR)
Project study
Problems Reporting to the Customer
Missing data for modeling, data for Family creation
Collection of information
BEP
Establishing Communication protocols
Identify Network enviroment
Establishing Data exchange protocols
Identify Software solutions from conceptual design to documentation stage
Establishing Modeling standards/LOD/LOI Levels
Identify project team roles&responsibilities
Customer validation
NO
Family creation
Quality control
NO
YES
MODELING
Automated Parametrization
Quality control
YES
Ready BIM Model

COMPETITIVE ADVANTAGE

BIM process. Project case study

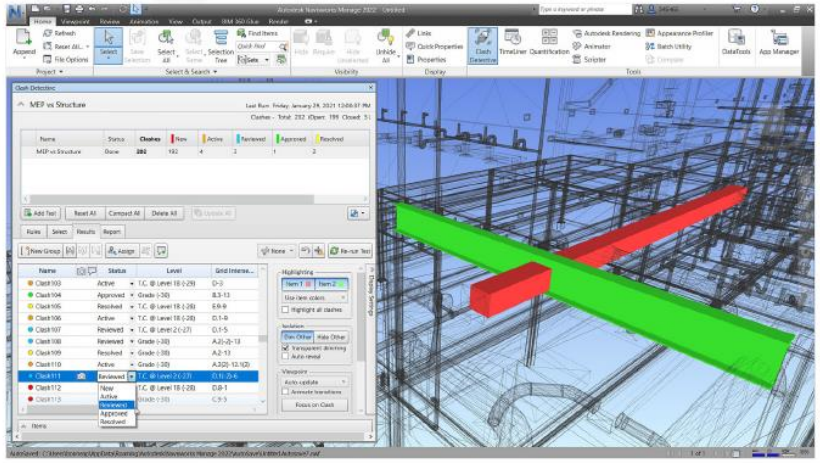
Design and MEP modeling

Design and modeling in 3D provides realsitic design solutions ready for implementation and further maintenance.



Clash Detection

Easy to collaborate with subcontractors and quick troubleshooting with clashes.



AR in per-construction and construction stages

We have eliminated massive collisions with construction elements, and other engineering systems during the pre-construction and construction stages of the project. Another benefit was to control the installation process according to the design, and HVAC model.

Software: GAMMA AR

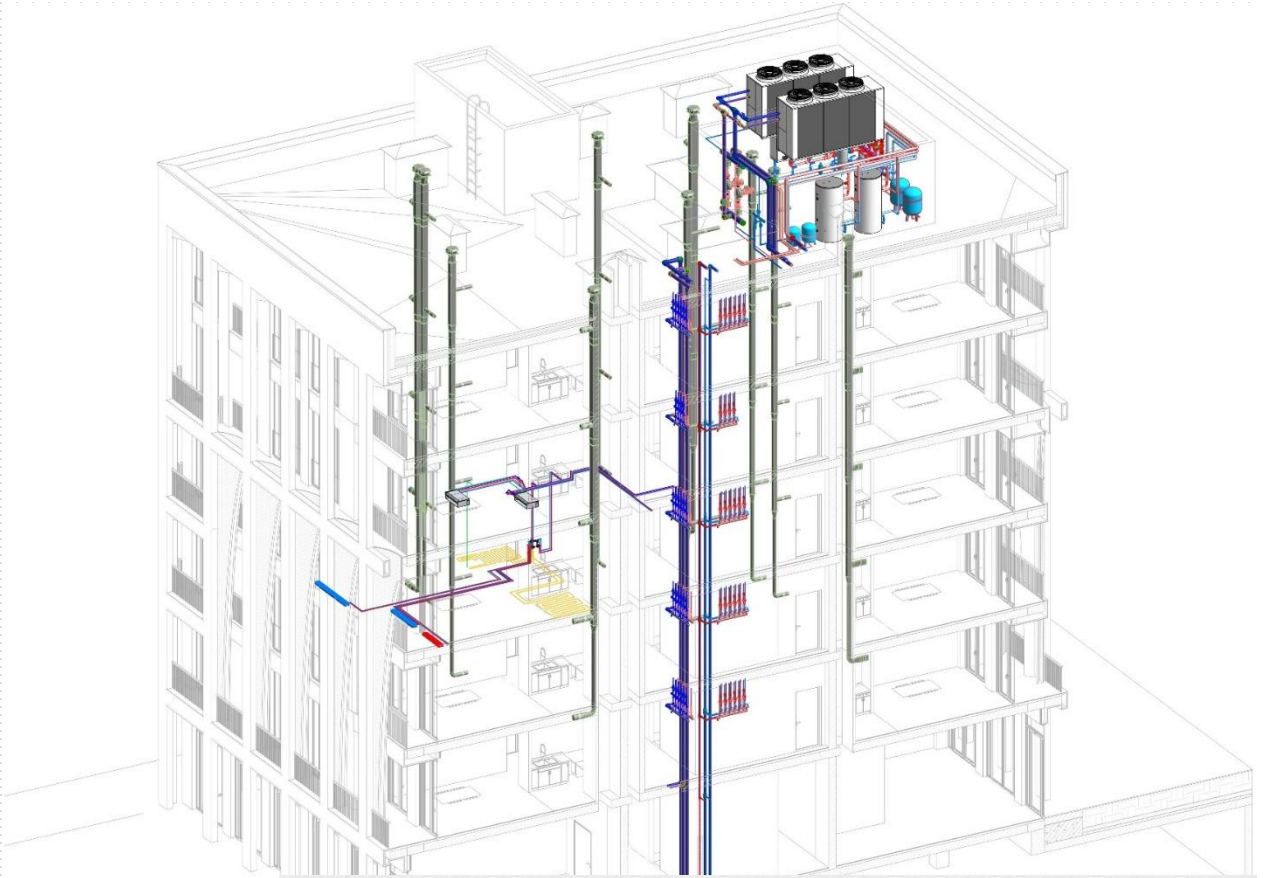
Software: miro

Software: Dynamo

Software: AUTODESK REVIT

Software: AUTODESK NAVISWORKS

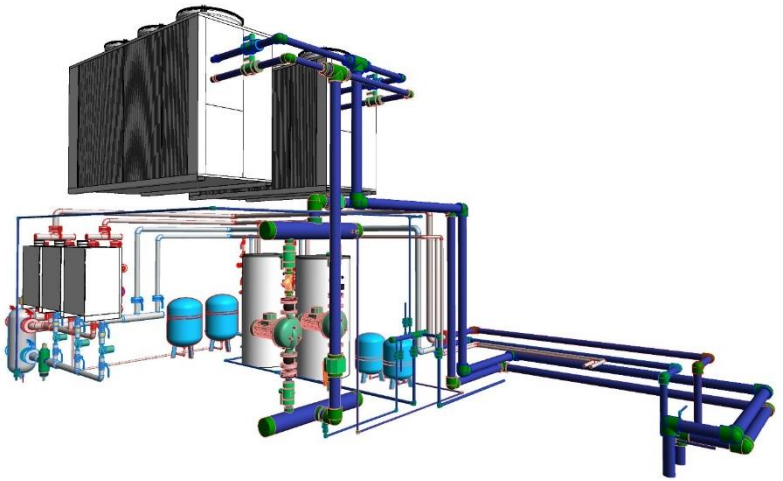
BIM featured PROJECTS



Project: Multi-unit residential complex. The objective of the project is to develop concept design, detailed design, coordinated, clash free BIM model based for proper installation works on the construction site.

Scope of job

- Development of BIM model of heating, cooling and ventilation systems
- Interdisciplinary coordination, clash reporting
- Shop drawing production



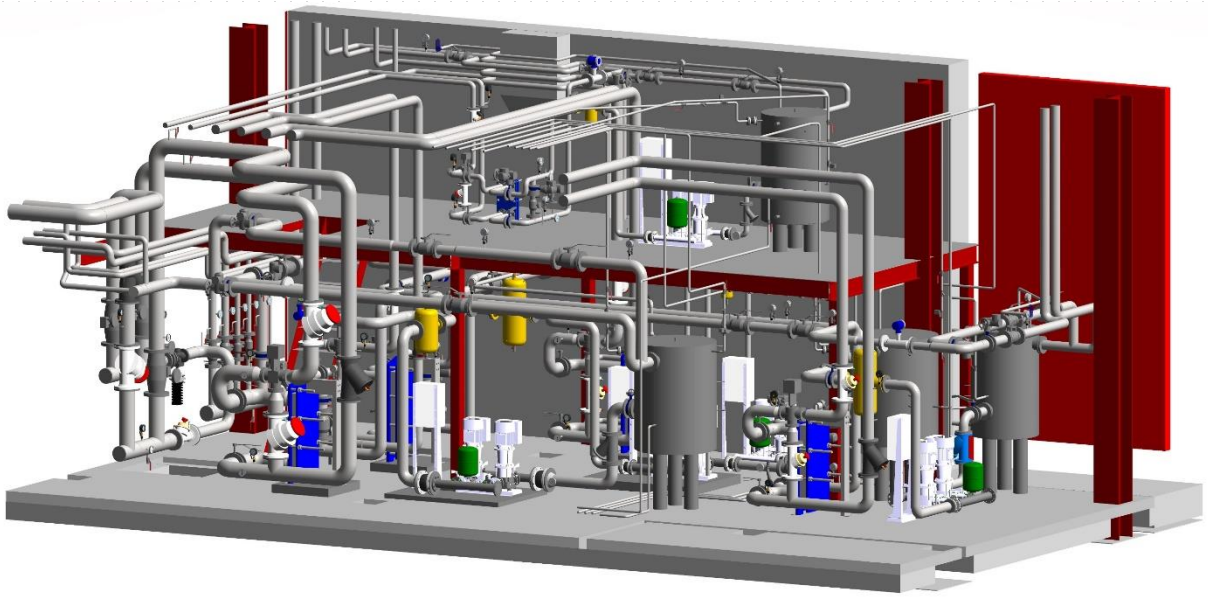
BIM featured PROJECTS

STRABAG

Project: **The mega-science project** is a major nuclear physics research facility. The objective of the project was to provide high accuracy BIM model for entire technological and process cooling.

Scope of job

- 2D design review, reporting on issues and troubleshooting
- Development of BIM model according to BEP
- Interdisciplinary coordination, clash reporting
- Updating BIM Model according to photos from the site and point cloud
- Creating Families of main equipment
- Automation of Parametrization using Dynamo
- Linking mechanical BIM model to Federated Model

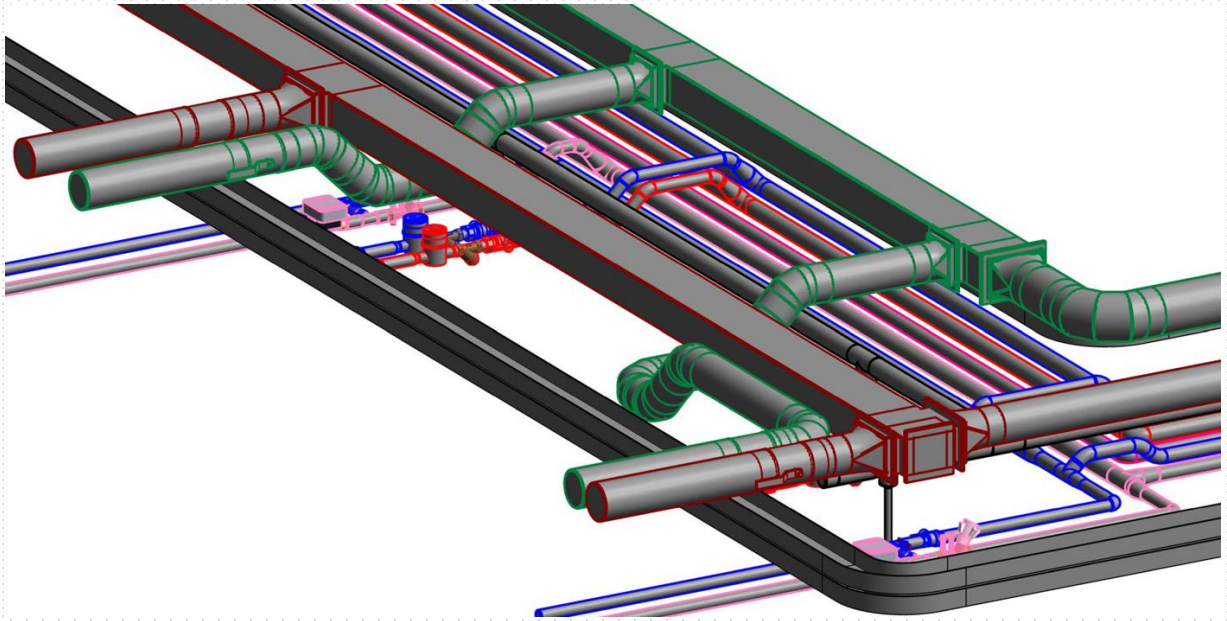


STRABAG

Project: Multi-unit residential complex. The objective of the project was to develop coordinated, clash free BIM model based on CAD for proper installation works on the construction site.

Scope of job

- 2D design review
- Development of BIM model of MEP systems
- Interdisciplinary coordination, clash reporting
- Shop drawing production

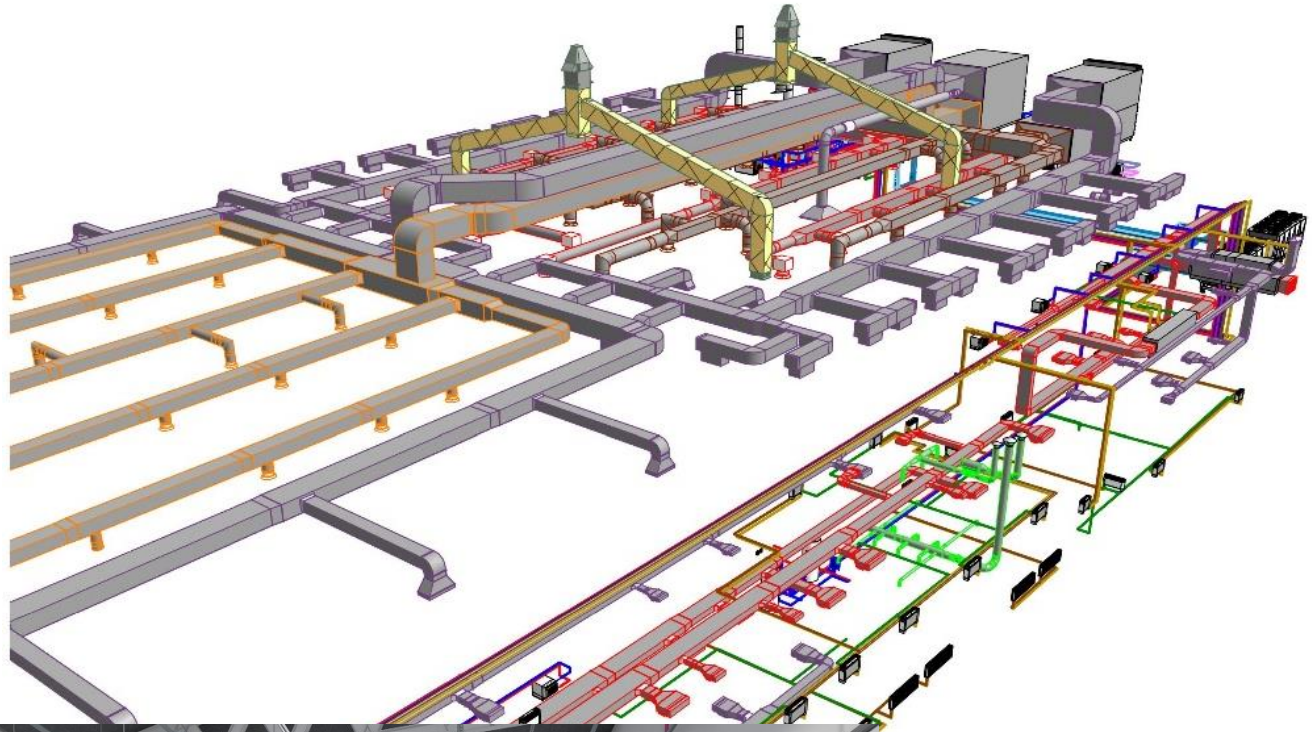


BIM featured PROJECTS

Project: Water bottling production. The objective of the project was to create a comfortable indoor air environment in areas with different designation: *production, warehouse, administrative, as well as technological hot water production*.

Scope of job

- Mechanical, plumbing (M&P) system design
- Implementation of BIM methodology in design process
- Creating Families for main equipment
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model



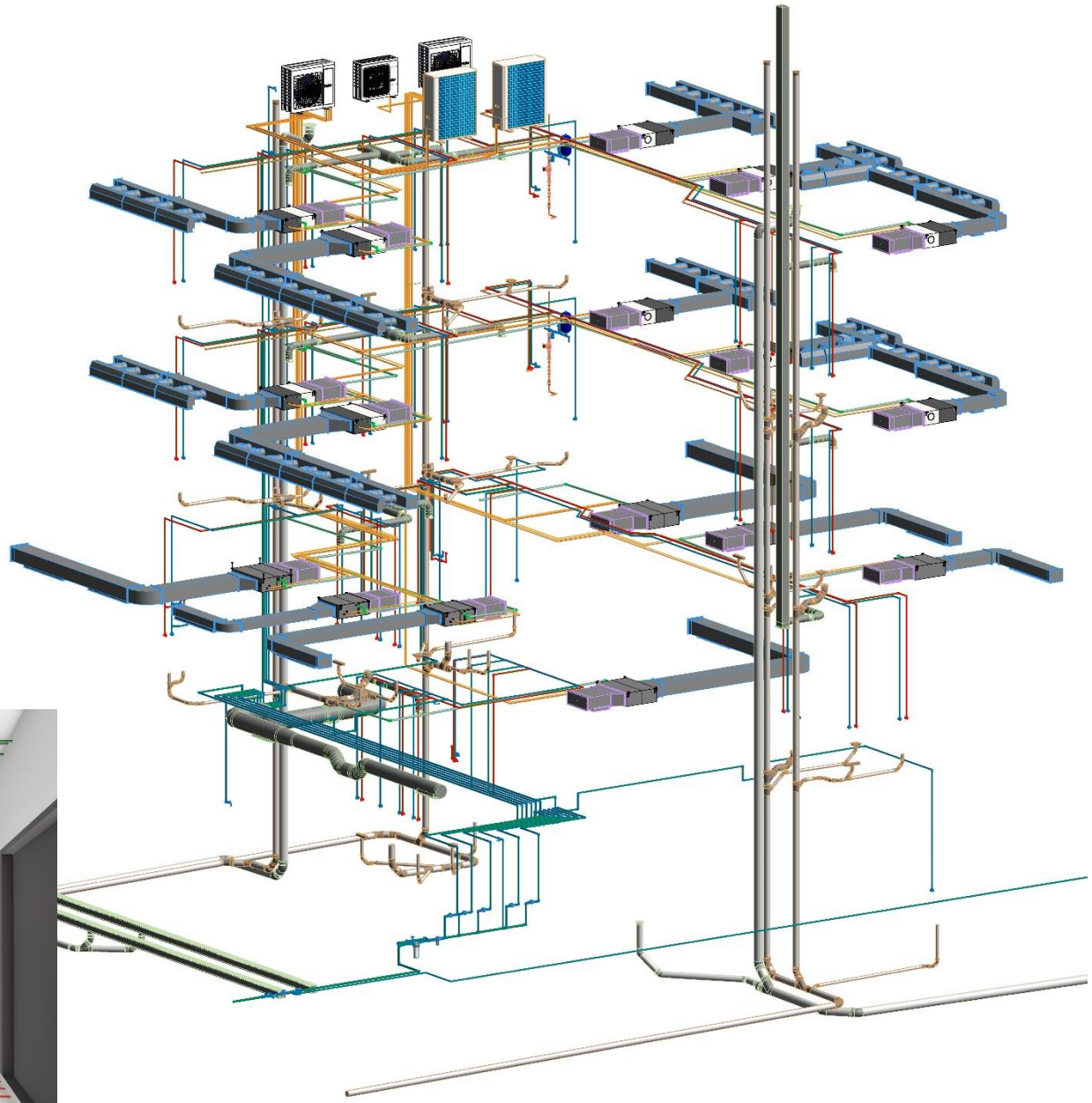
BIM featured PROJECTS

cubit
architecture and design studio

Project: The objective of the project was to create a comfortable indoor air environment in areas of residential building which could be used as Apart Hotel. The objective of the project is to develop detailed design, coordinated, clash free BIM model based for proper installation works on the construction site.

Scope of job

- Mechanical, Electrical, plumbing (MEP) system design
- Implementation of BIM methodology in design process
- Creating Families for main equipment
- Interdisciplinary coordination
- Quantity take-off from BIM model
- Supervision Electrical designer job

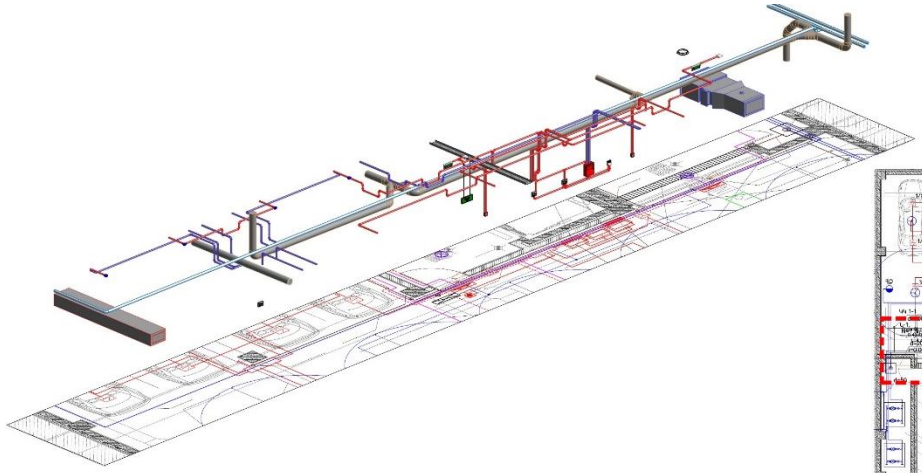


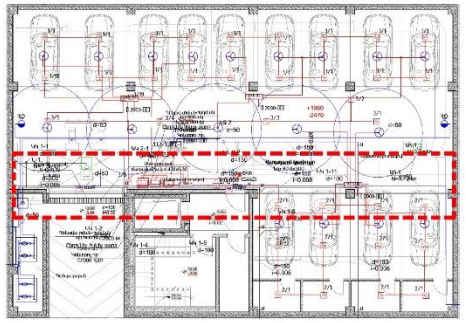
BIM featured PROJECTS

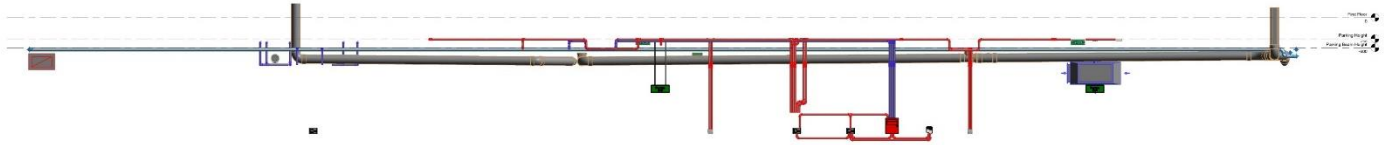
Project: Residential complex. The objective of the project is to develop clash free BIM model for parking areas for proper installation works on the construction site.

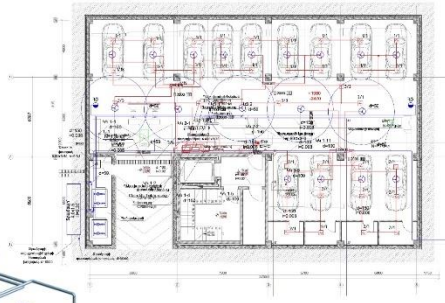
Scope of job

- Development of BIM model of MEP systems
- Interdisciplinary coordination, clash reporting
- Shop drawing production

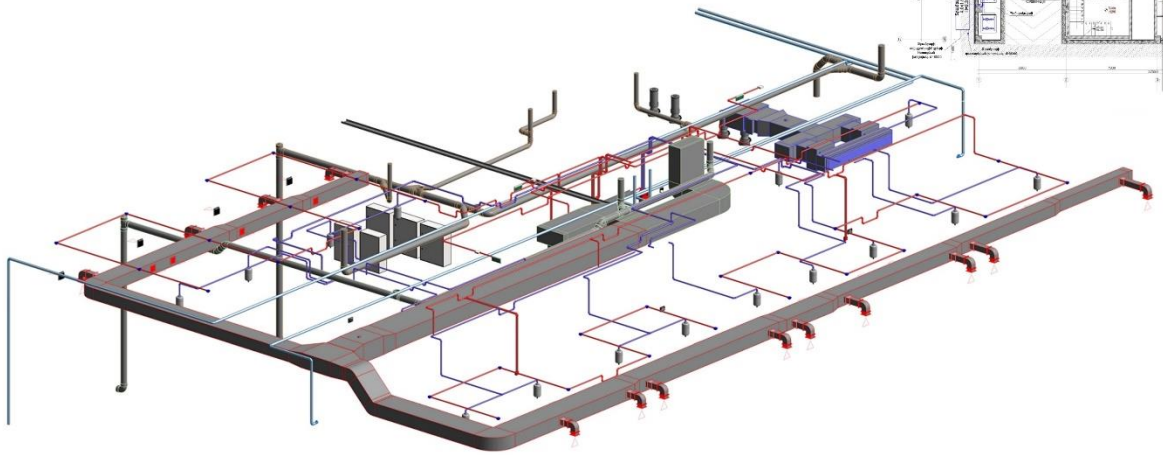








Fire Alarm X Power X Sprinklers X Ventilaton X Sewage & Cold Water



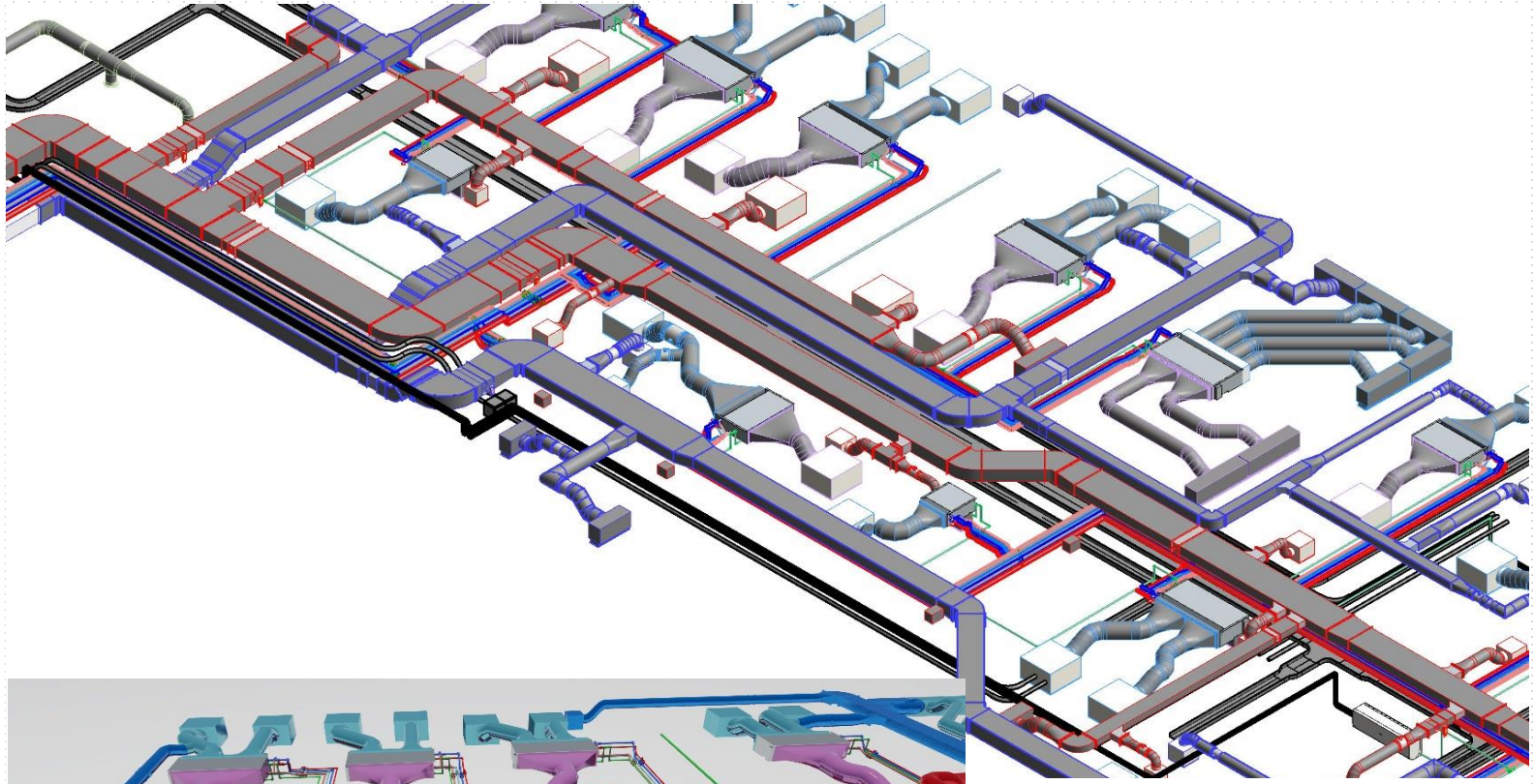
BIM featured PROJECTS

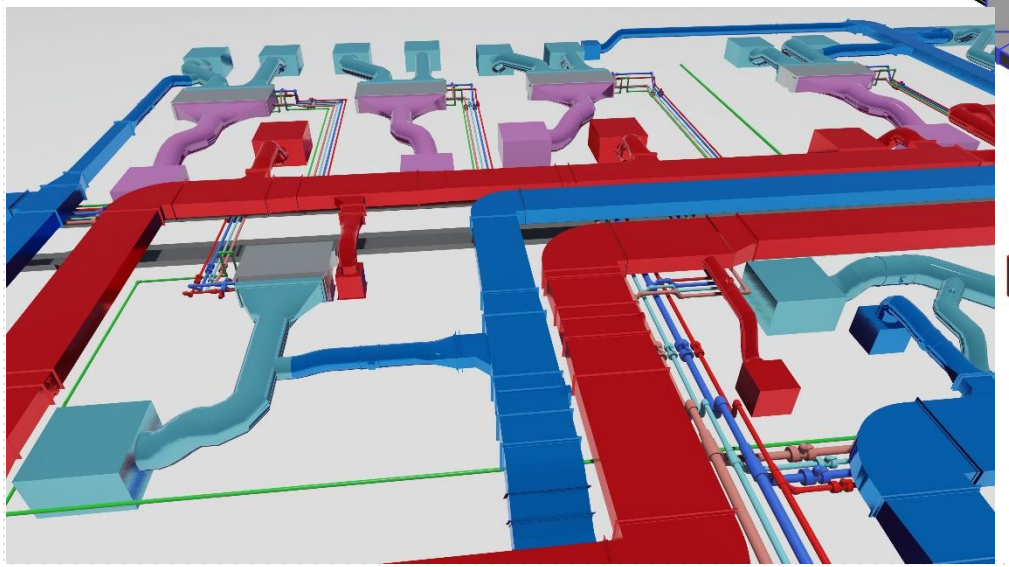
Government of Canada

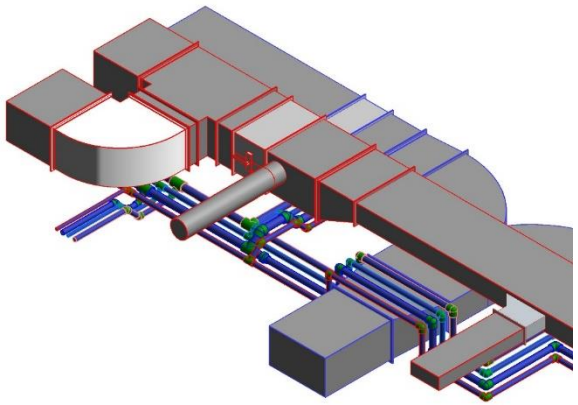
Project: Embassy of Canada in Armenia. The objective of the project is to develop detailed design, coordinated, clash free BIM model based for proper installation works on the construction site.

Scope of job

- HVAC system design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model







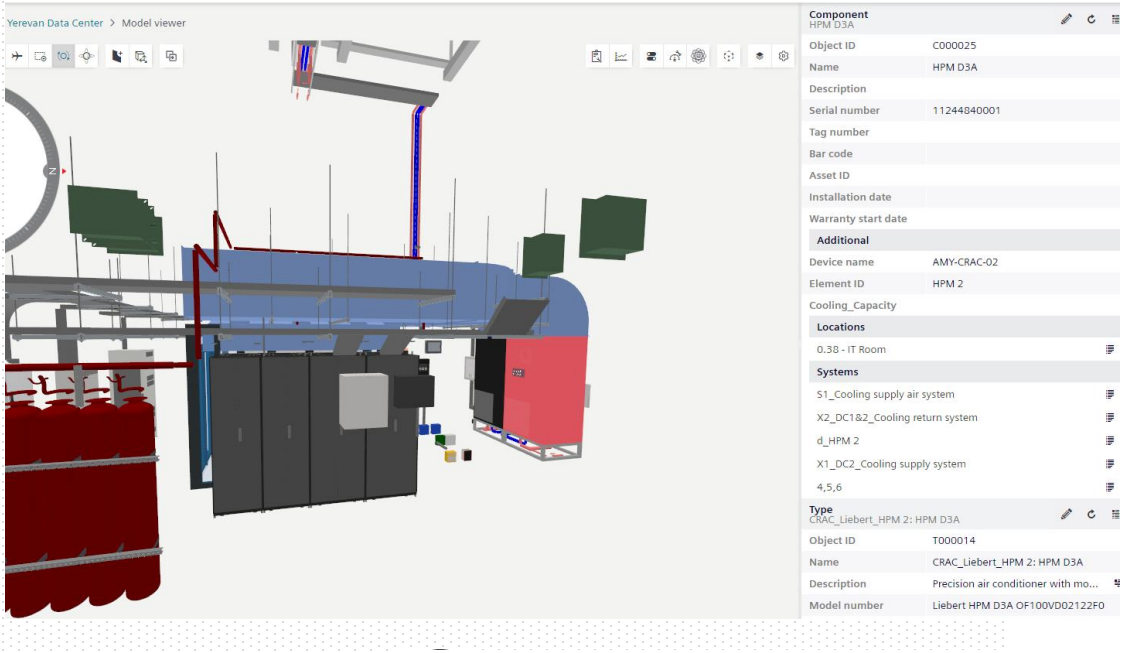
BIM featured PROJECTS

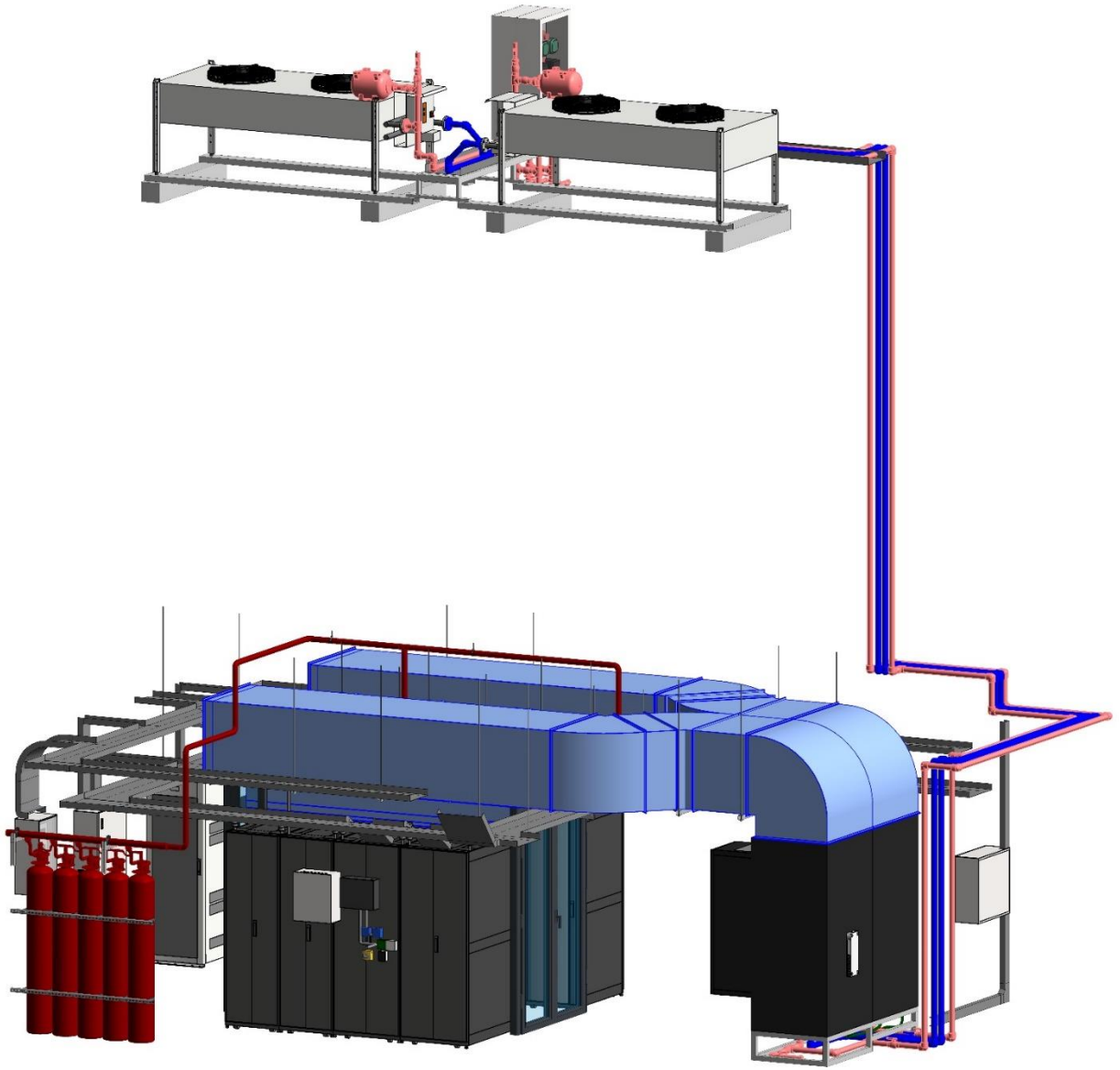
SIEMENS

Project: Data center. The objective of the project was to create as built model and leverage structured data for maintenance and operation using BIM methodology.

Scope of job

- Development of As Built BIM model of MEP systems
- Phase planning for the equipment subject to replacement
- Interdisciplinary coordination, clash reporting
- Revit Software training of customer staff
- Consultancy on Digital Twin platform implementation





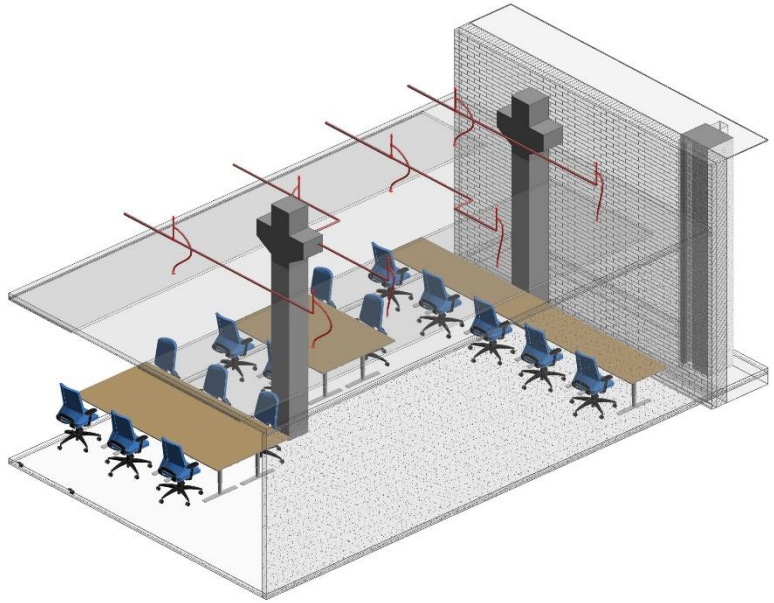
BIM featured PROJECTS

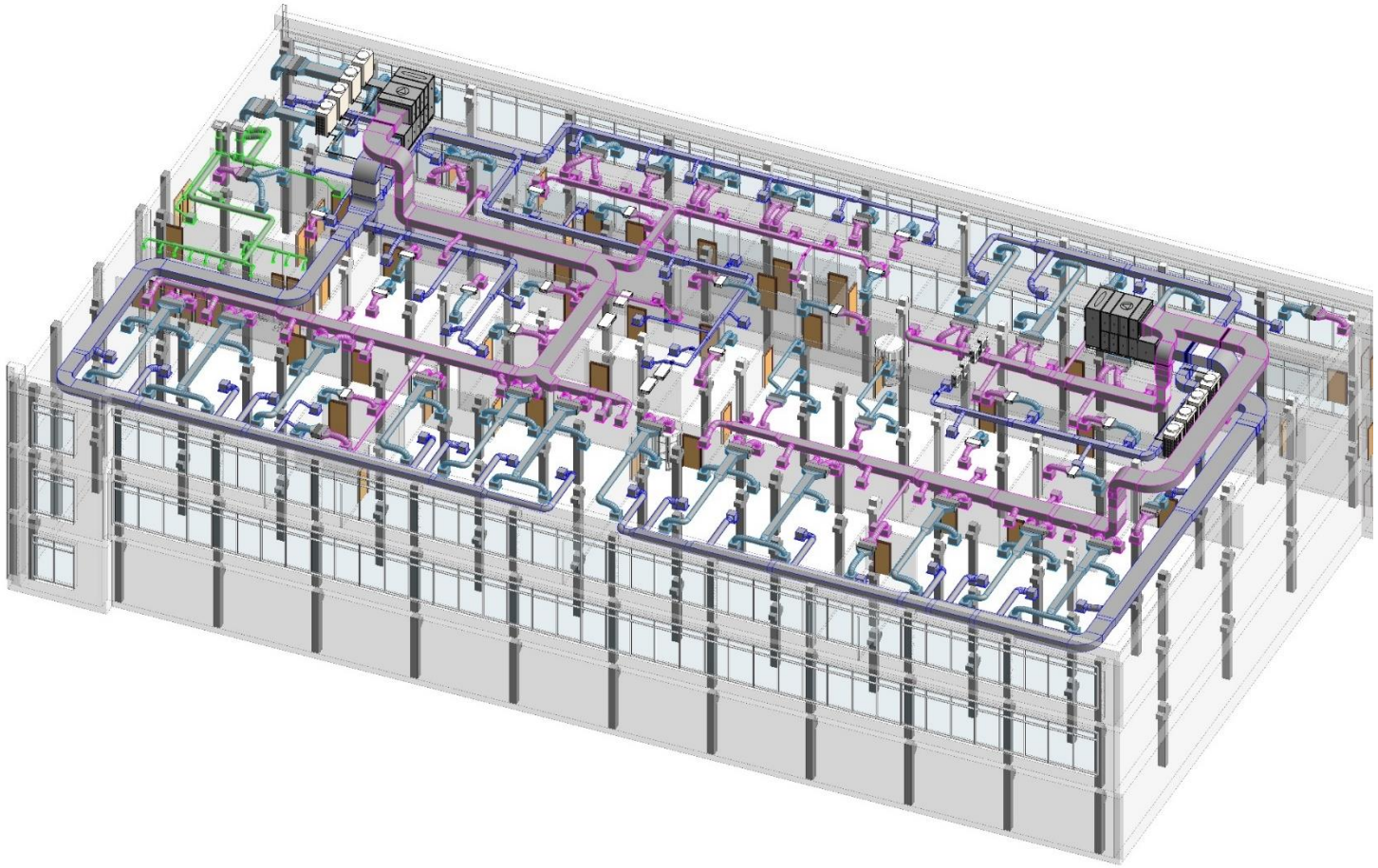
majorel

Project: Office facility for outsourcing team of German company. The objective of the project was to create a comfortable indoor air environment

Scope of job

- Mechanical, plumbing (M&P) system design
- Sprinkler Fire fighting system design (FS), included pump station
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, FS with 3rd party electrical, architecture)
- Quantity take-off from BIM model



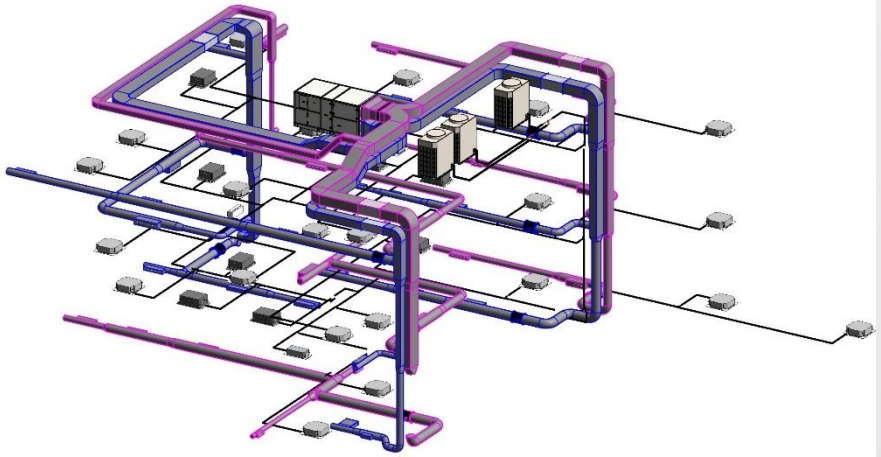


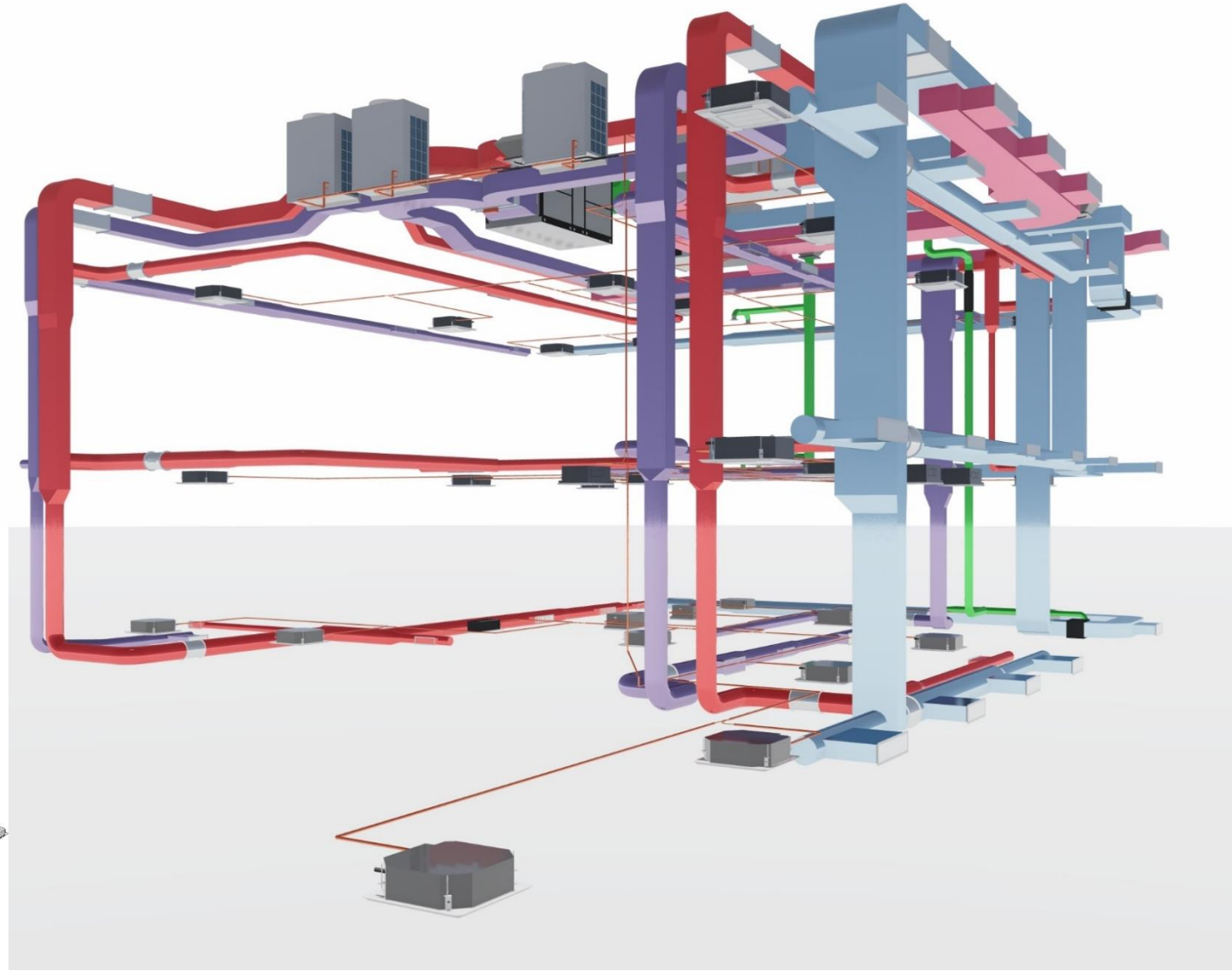
BIM featured PROJECTS

Project: Office facility. The objective of the project was to create a comfortable indoor air environment.

Scope of job

- Mechanical, plumbing (M&P) system design
- Sprinkler Fire fighting system design (FS), included pump station
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, FS with 3rd party electrical, architecture)
- Quantity take-off from BIM model





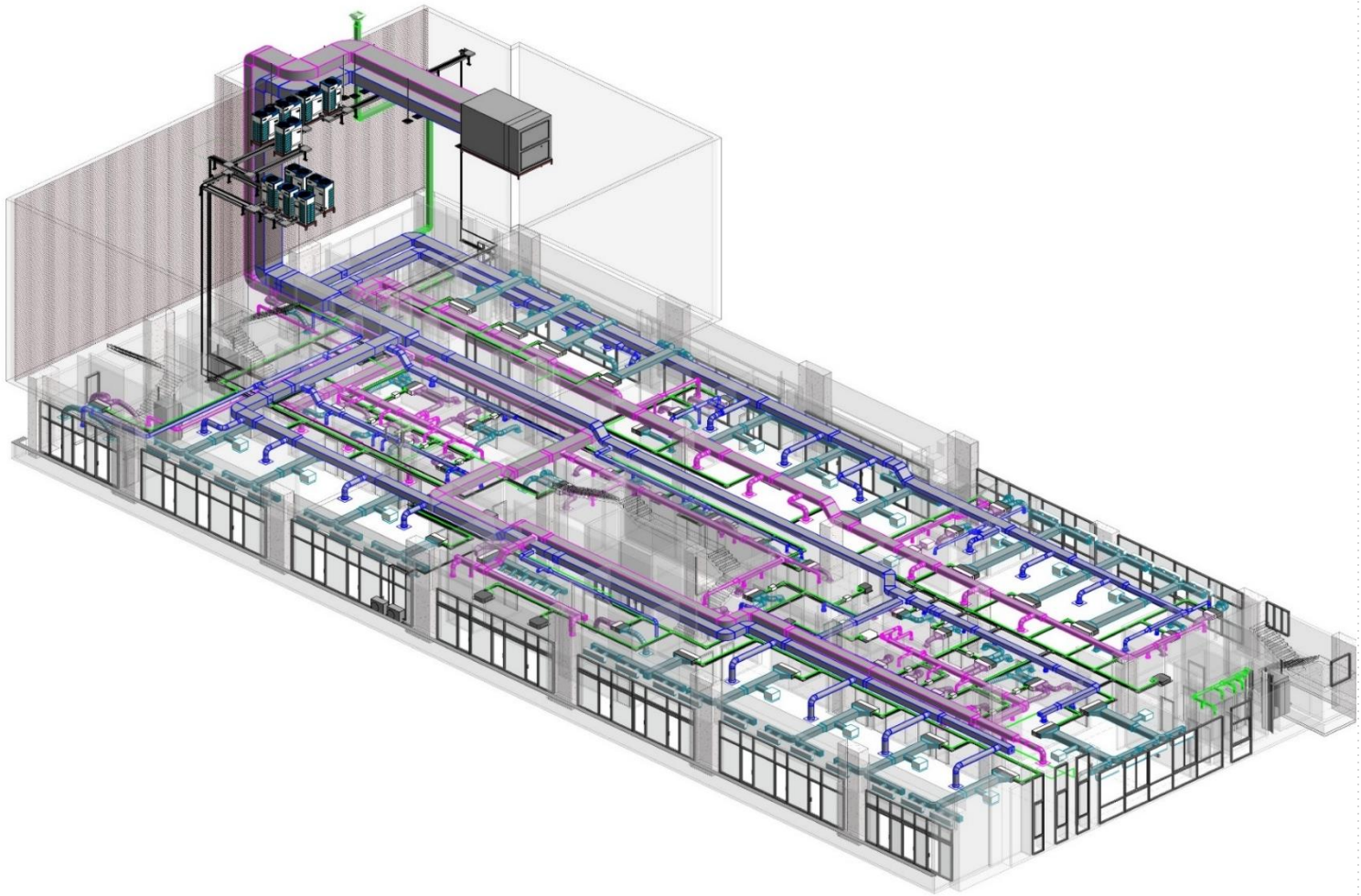
BIM featured PROJECTS

Adobe
YEREVAN Offices

Project: Office facility for outsourcing team of Adobe.
The objective of the project was to create a comfortable indoor air environment.

Scope of job

- Mechanical, plumbing (M&P) system design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model



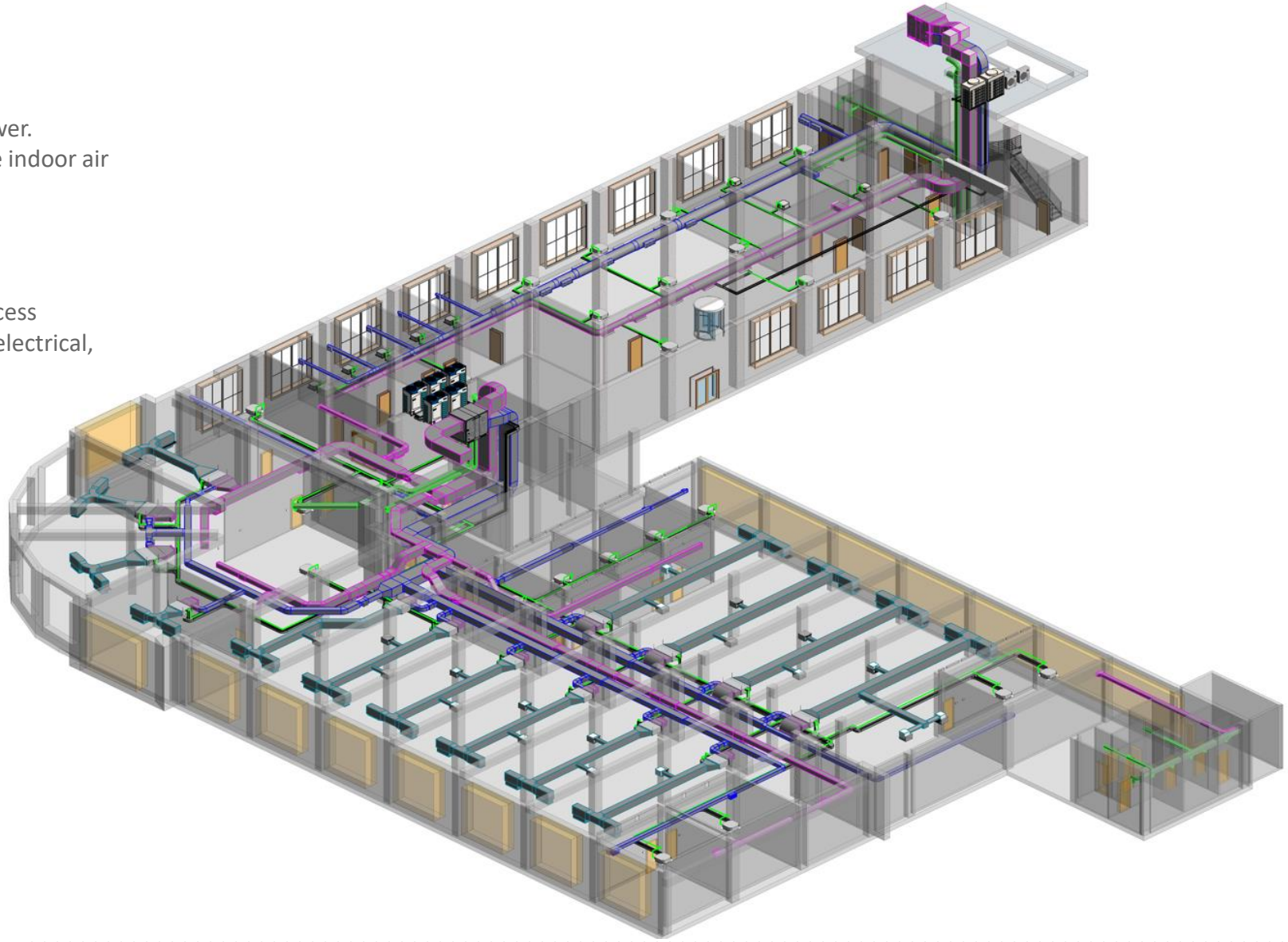
BIM featured PROJECTS

TeamViewer

Project: Office facility for outsourcing team of TeamViewer.
The objective of the project was to create a comfortable indoor air environment.

Scope of job

- Mechanical, plumbing (M&P) system design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model
- Shop drawings for construction



BIM featured PROJECTS

TESLA
ENERGY

Project: Show room and service center of Tesla cars
The objective of the project was to create a comfortable indoor air environment with high ceiling metallic building.

Scope of job

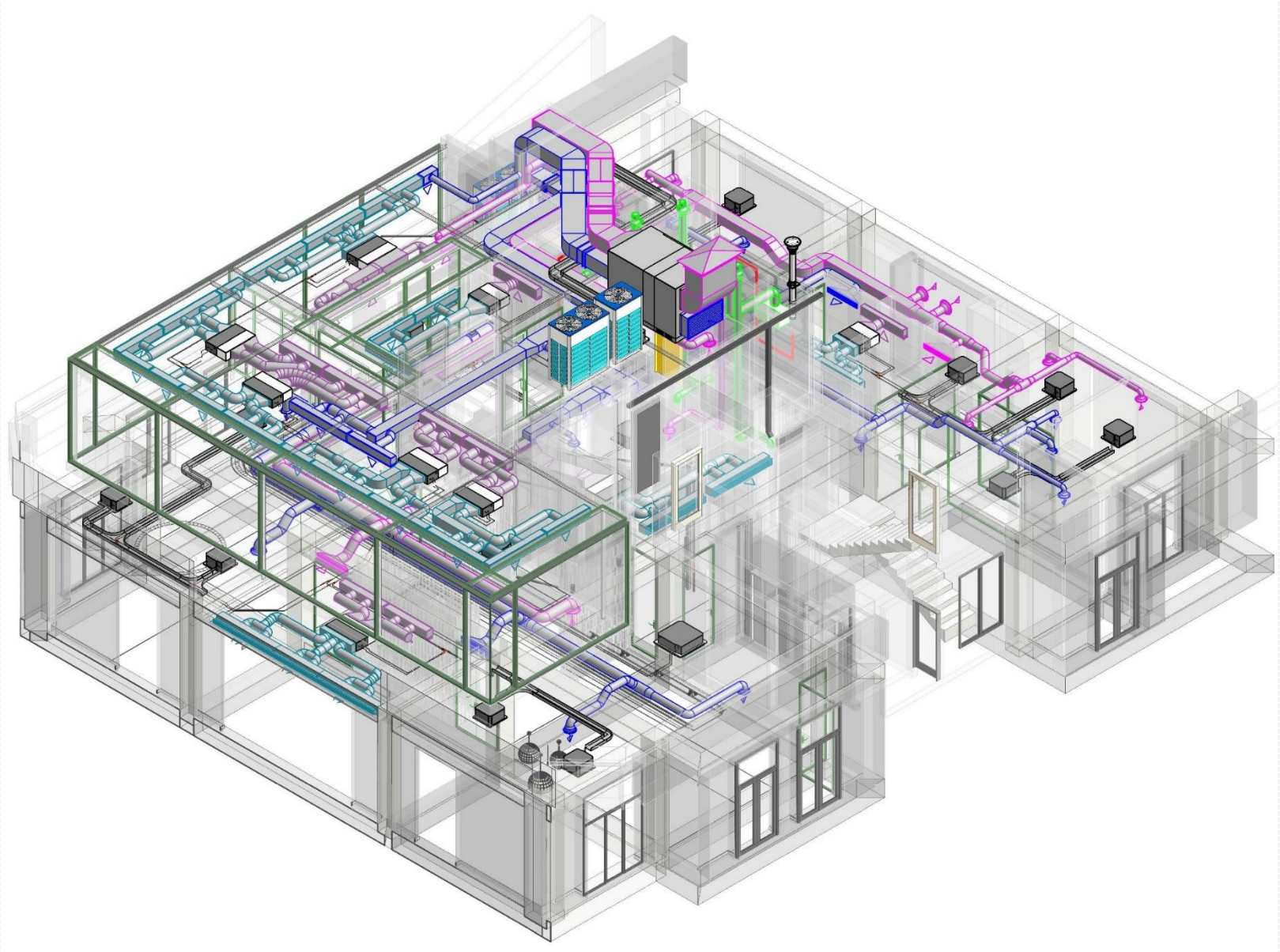
- Mechanical, plumbing (M&P) system design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model
- Shop drawings for construction

BIM featured PROJECTS

Project: Co working space for IT specialists.
The objective of the project was to create a comfortable indoor air environment.

Scope of job

- Mechanical, plumbing (M&P) system design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (M&P, with 3rd party electrical, architecture)
- Quantity take-off from BIM model
- Shop drawings for construction
- Implementing Augmented reality to supervise installation process.



BIM featured PROJECTS

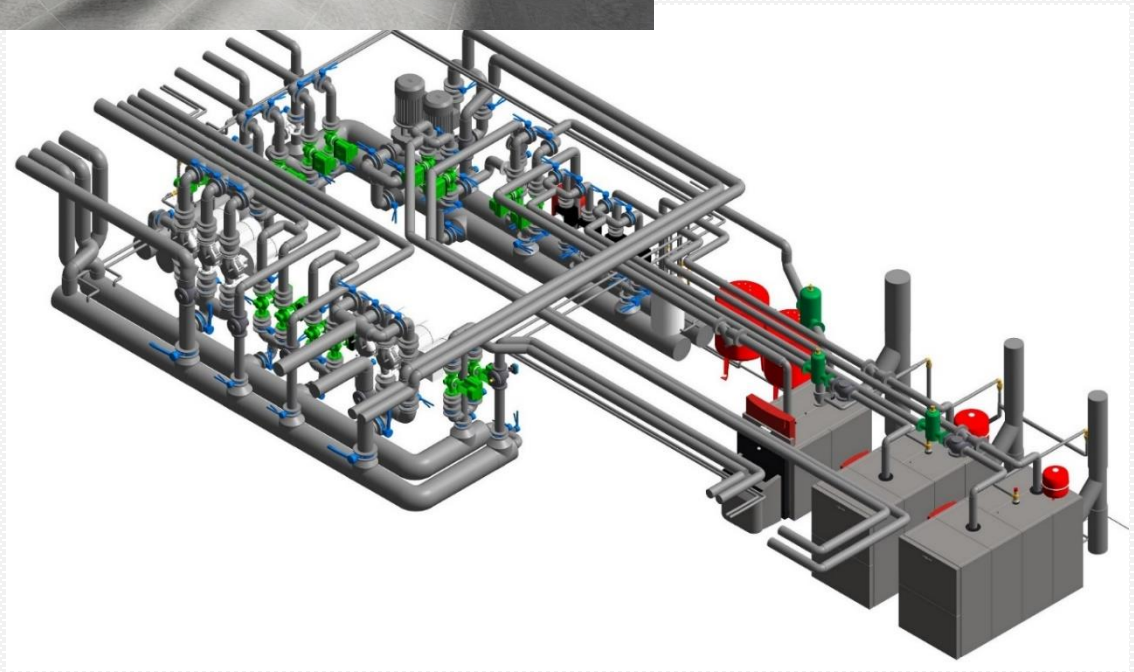
PRODECO

KAMAR BUSINESS CENTER

Project: Roof boiler house based on cascade condensing boilers. The objective of the project was to create energy efficient heat generation. The challenge was the relatively small area of the boiler house. Implementing BIM in the design allowed us to create precise placement and pipe routing.

Scope of job

- Site utilization planning
- Boiler house design
- Implementation of BIM methodology in design process
- Interdisciplinary coordination (mechanical and architecture)
- Quantity take-off from BIM model
- Shop drawings for construction
- Project scheduling and phase planning



References

1. **STRABAG**: Mega science project.
   Development of a BIM model for the entire technological cooling system. Interdisciplinary coordination.
2. **STRABAG:** Residential building.
   Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
3. **Plowman Craven**: Heritage administrative building
   Development of as built BIM model based on point cloud.
4. **SIEMENS**: Data center.
   Development of an "as-built" BIM model. Development of a BIM model for operation and maintenance, and integration of the BIM model into a Digital Twin for operation and maintenance.
5. **RARE AM**: Water bottling factory.
   Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
6. **Hotel facility in Belgium**.
   Development of Mechanical and plumbing BIM models. Interdisciplinary coordination.
7. **Liqvor**. Production facility
   Development of Mechanical and plumbing BIM models. Interdisciplinary coordination.
8. **Thermoros Armenia**: Embassy.
   Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
9. **Thermoros Armenia**: Polytechnic University Training Center.
   Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
10. **Thermoros Armenia**: Hotel Complex.
    Development of BIM models Interdisciplinary coordination. Preparation of working documentation.
11. **Ameriabank**. Branch office
    Development of BIM model. Interdisciplinary coordination. Preparation of working documentation.
12. **TITAN THERMAL**: Calgary University.
    Development of a BIM model for technological heating and steam distribution based on ASME standards. Interdisciplinary coordination.
13. **Cubit Architectural Studio**: Residential building
    Development of a BIM model. Interdisciplinary coordination.
14. **ADOBE**: Office
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
15. **TeamViewer**: Office
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
16. ARCHcoop: Office
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
17. **AL.Team Architectural Studio**: Office
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
18. **MAJOREL**: Office
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
19. **Tesla Energy**: Carshowroom&Service
    Development of a BIM model. Interdisciplinary coordination. Preparation of working documentation.
20. **PRODECO**: Kamar business center, boiler house
    Development of a BIM model for the detailed design stage. Preparation of working documentation.
    Development of an "as-built" BIM model.