## *PROJECTS:*

Residential Buildings, Commercial Buildings, and Industrial Buildings.

Residential Buildings

This project involves the development of construction under three-story public building with a reinforced concrete frame.

The project was created in Autodesk Revit based on the calculations performed in Autodesk Robot structural analysis. In the process of calculation of the model in Autodesk Robot, structural analysis was used for the modeling of wind loads on the building construction.
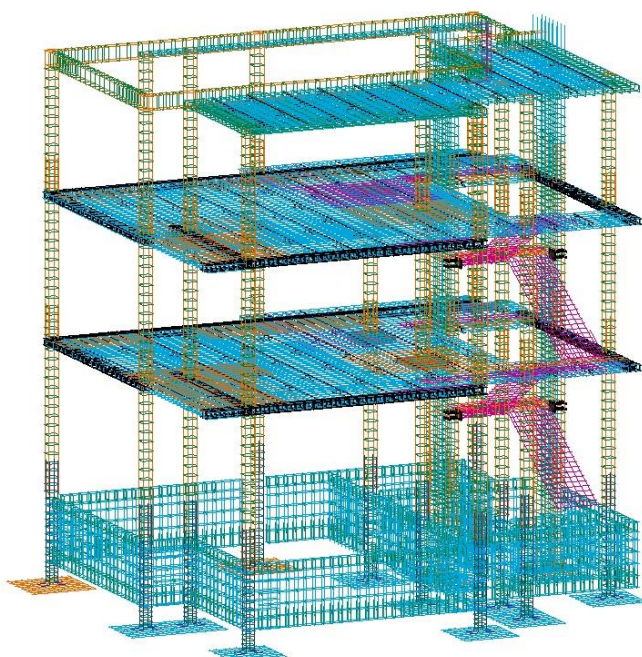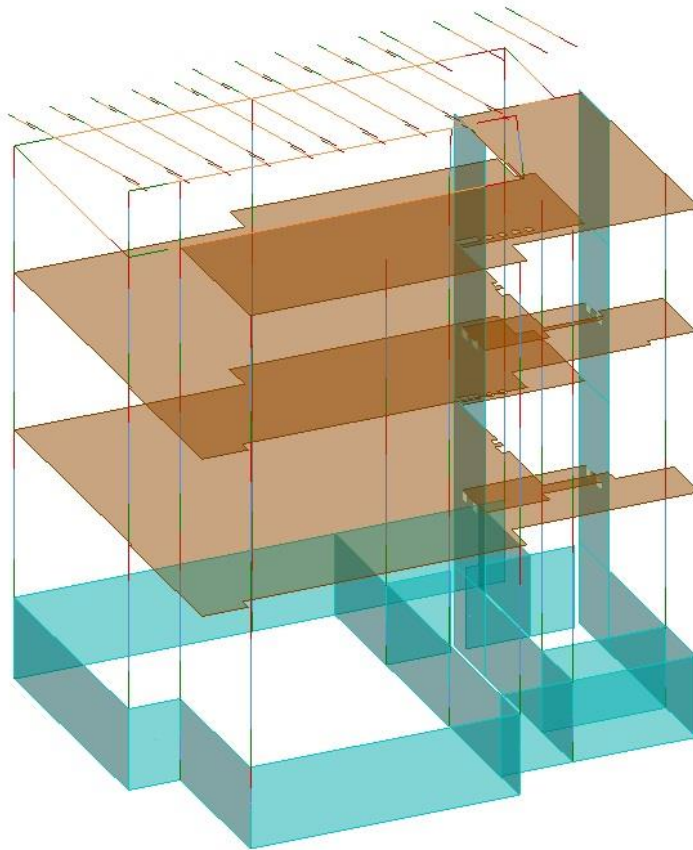
The general view of the building construction:
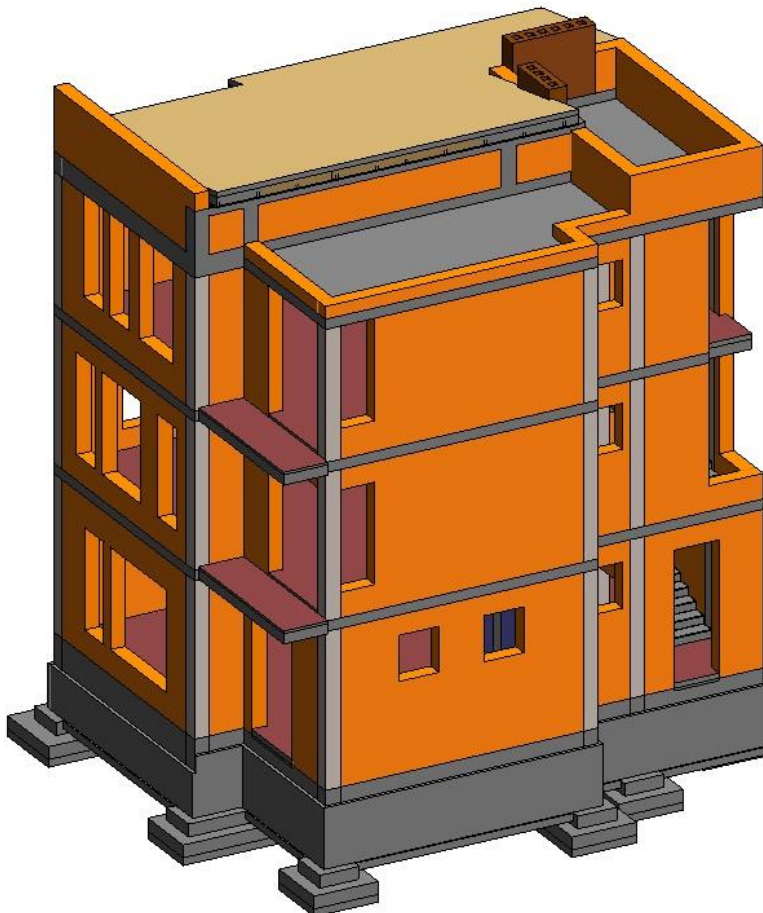
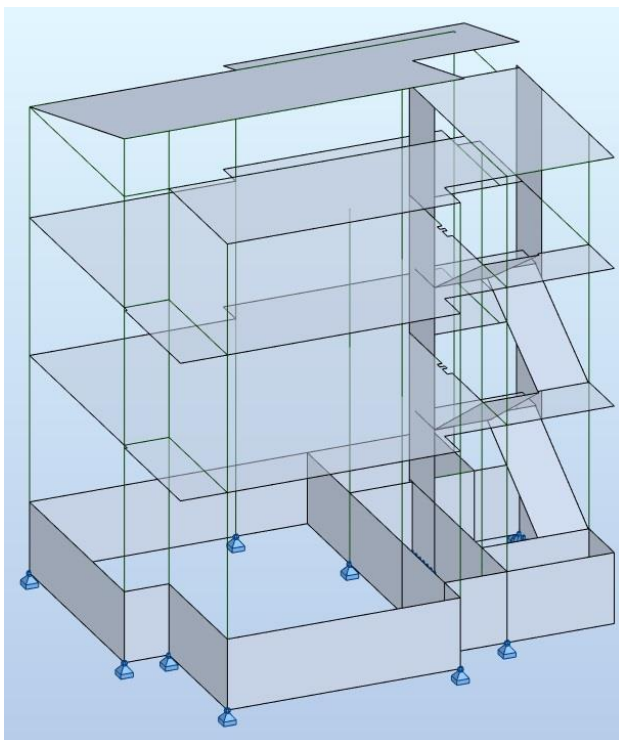*Ferro-concrete monolithic frame construction:*
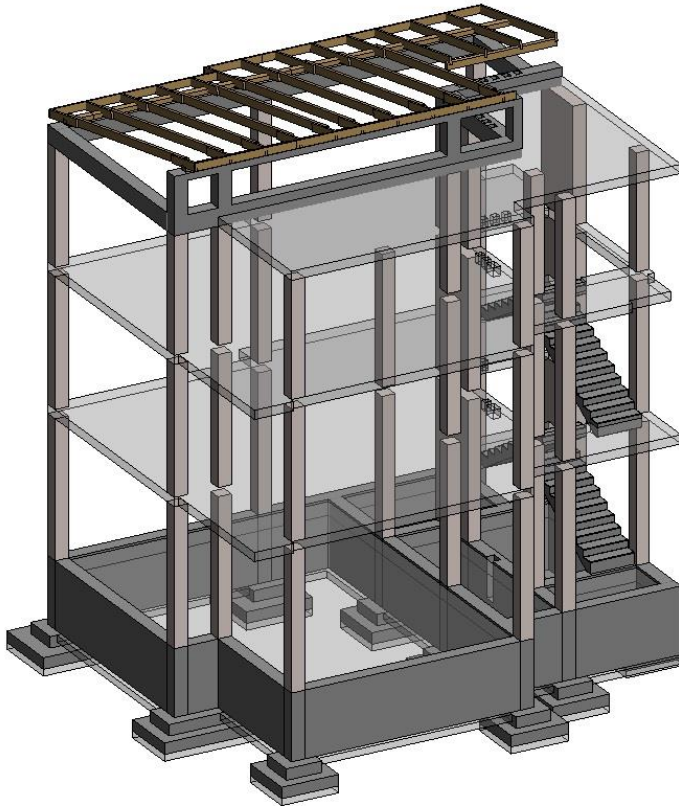
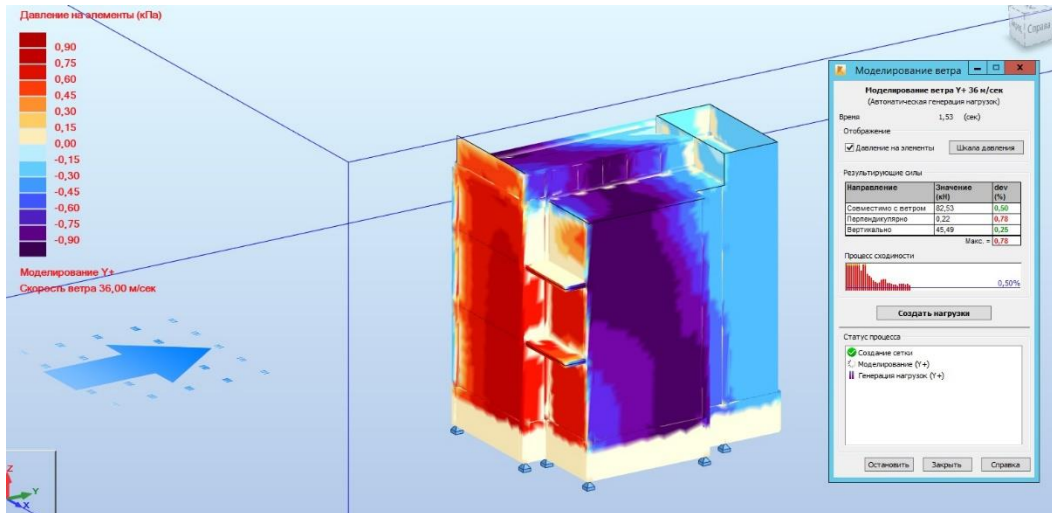*Model of reinforcing skeleton of reinforced concrete frame construction:*

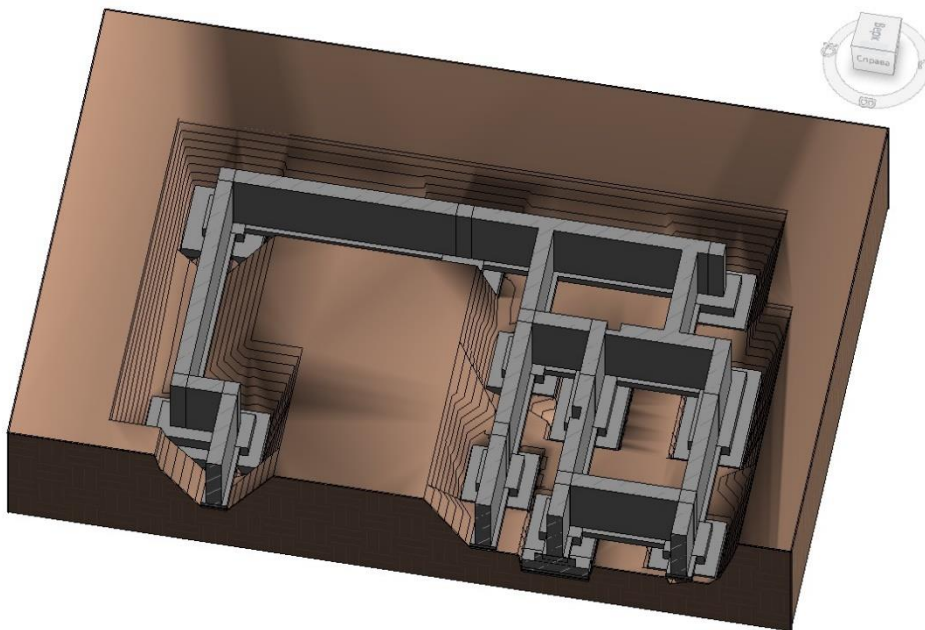*Analytical model of building frame Autodesk Revit:*

Analytical model of building frame in Autodesk Robot structural analysis:
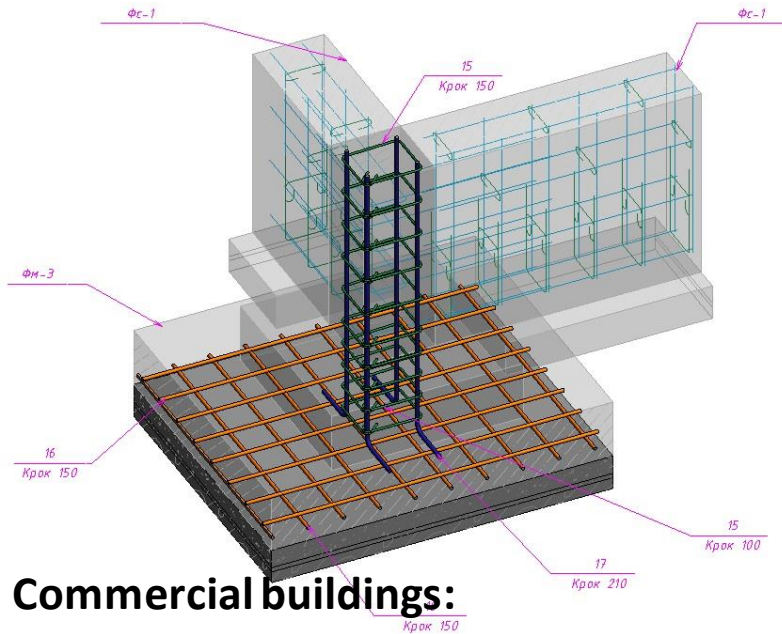
Modeling of wind loads on building structures in Autodesk Robot structural analysis:

Actual topography with a soil development under the foundations:

Design of reinforcement of monolithic foundations in axonometric:


Commercial buildings:

<u>The reconstruction of retail and office premises on Shota Rustaveli street, 12</u>

The following project involves the development of the construction under retail and office premises with a superstructure of two wooden frame floors. The project was created in Autodesk Revit based on the calculations performed in Autodesk Robot structural analysis.

In the process of project creation in Autodesk Revit the construction stages have been applied to indicate the existing unmounting, as well as newly designed constructions which will be built up in the process of building.
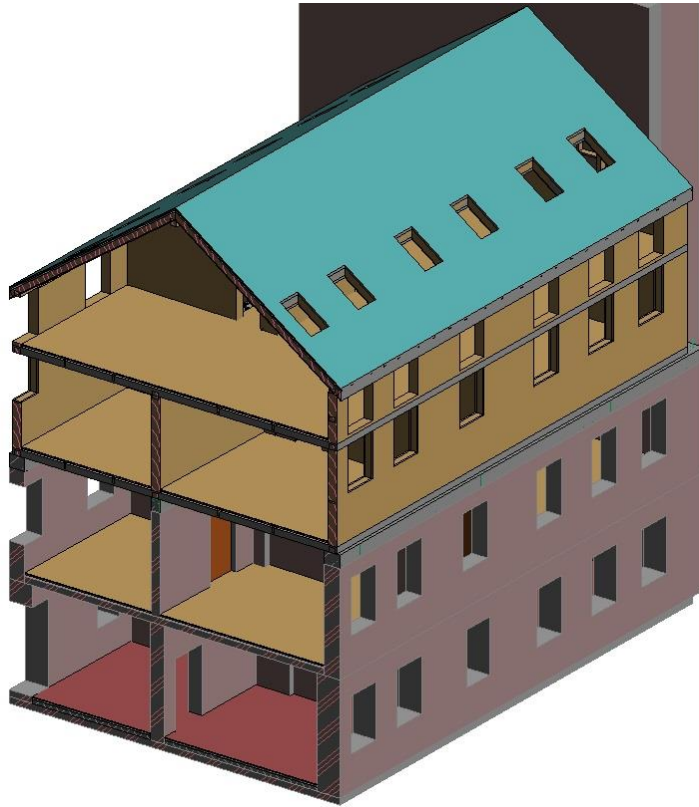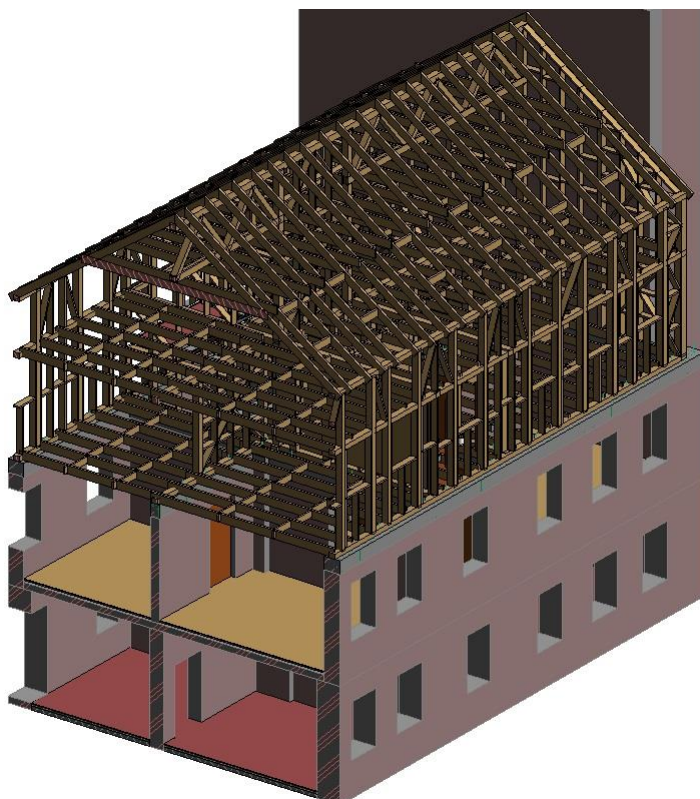
Visual view of the building
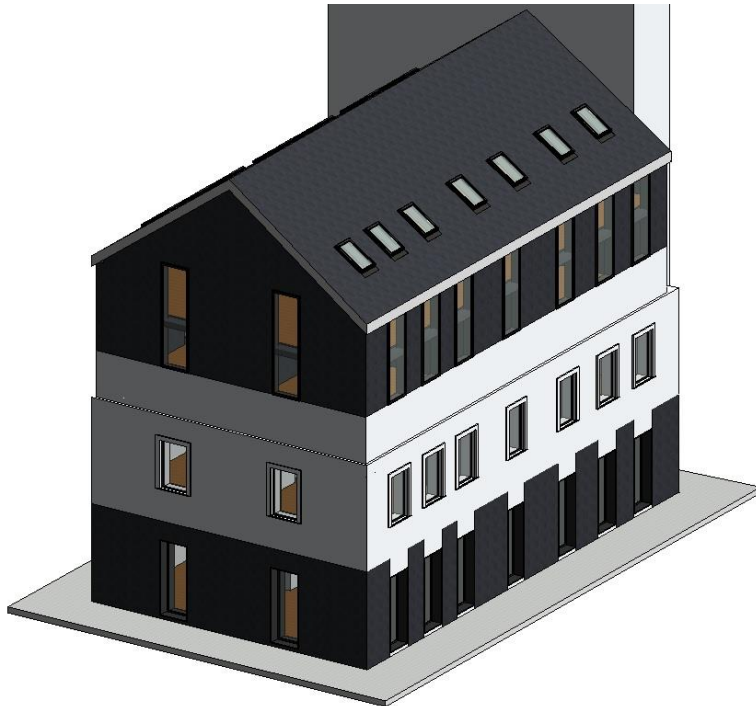
General view of the existing two-story building. The constructions, which are dismantled, are marked in red.
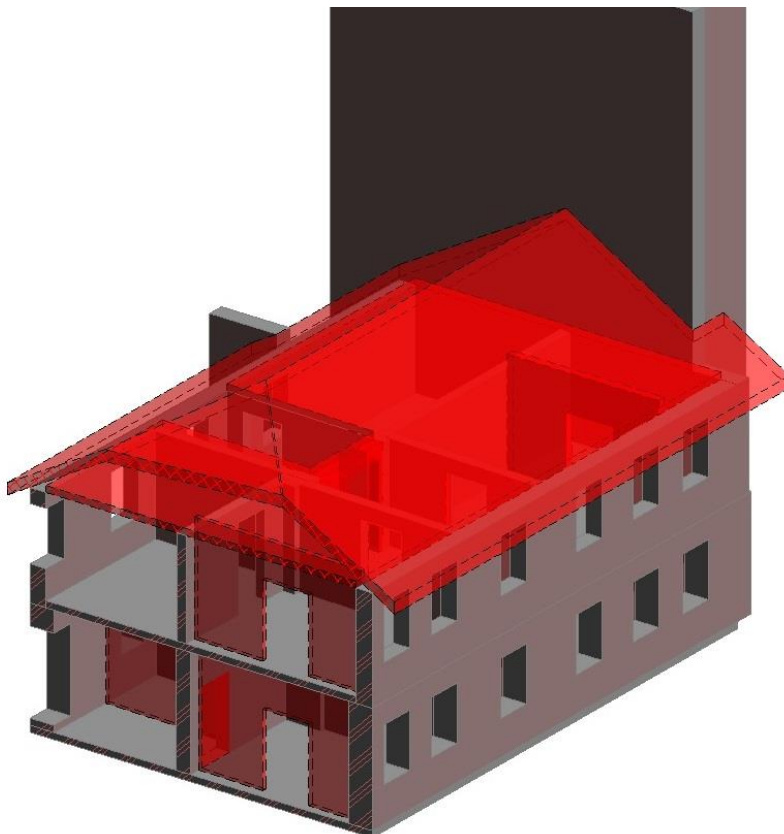
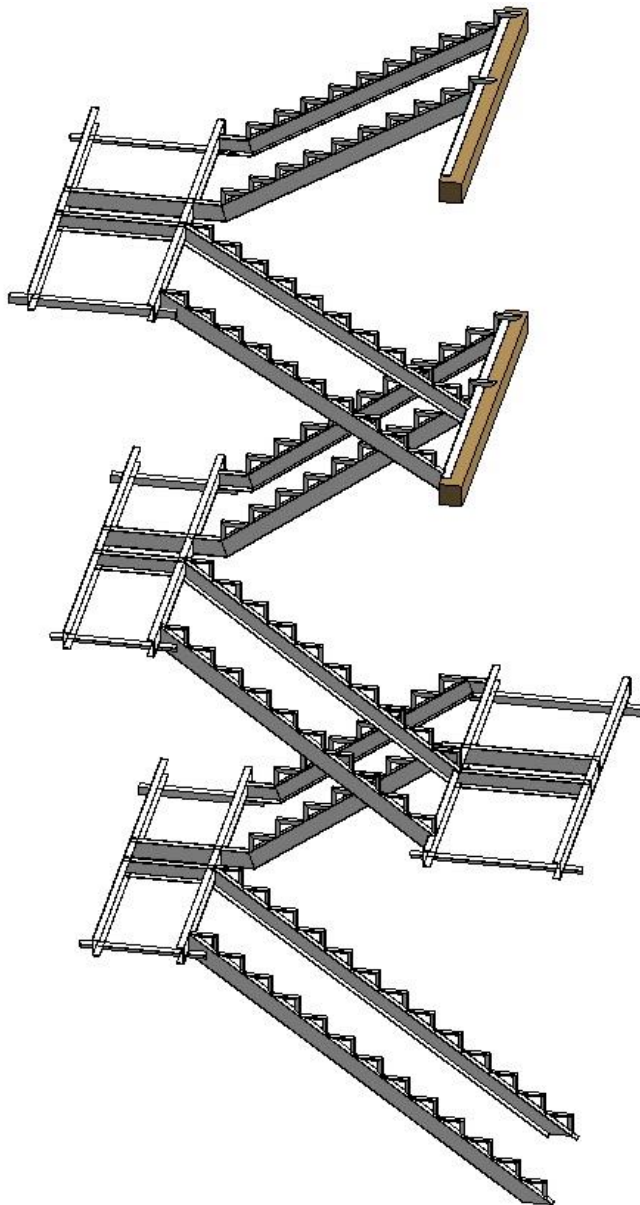*General view of the designed construction with a superstructure of two floors:*
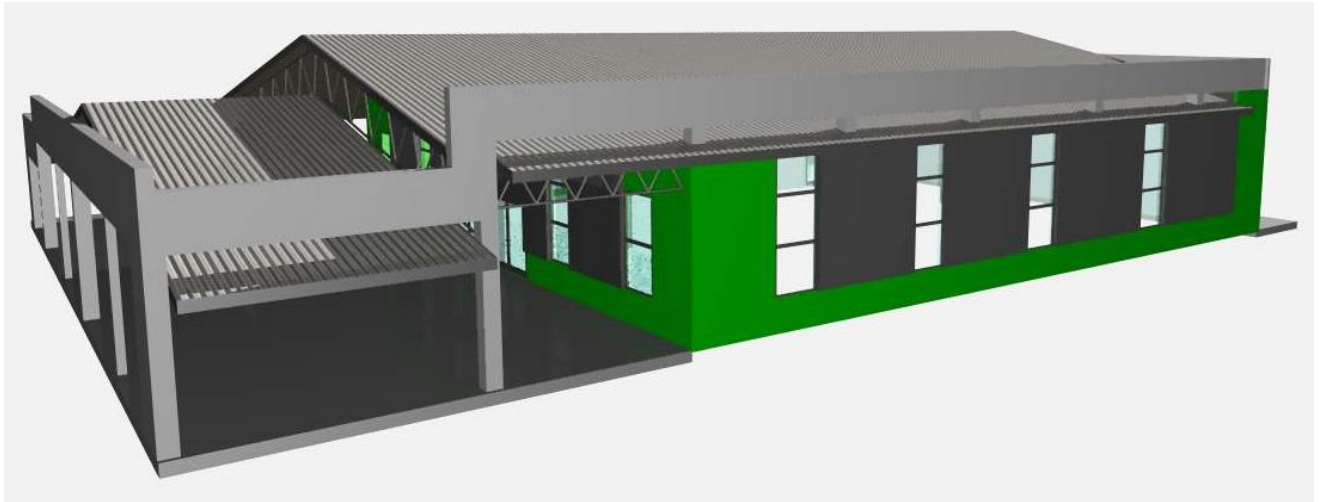

Wooden frame of the superstructure of two floors:

Steel skeleton of the frame is designed from the new developed classes for Autodesk Revit:
Parameterized steel beams made from assortment profiles under the construction of stairs
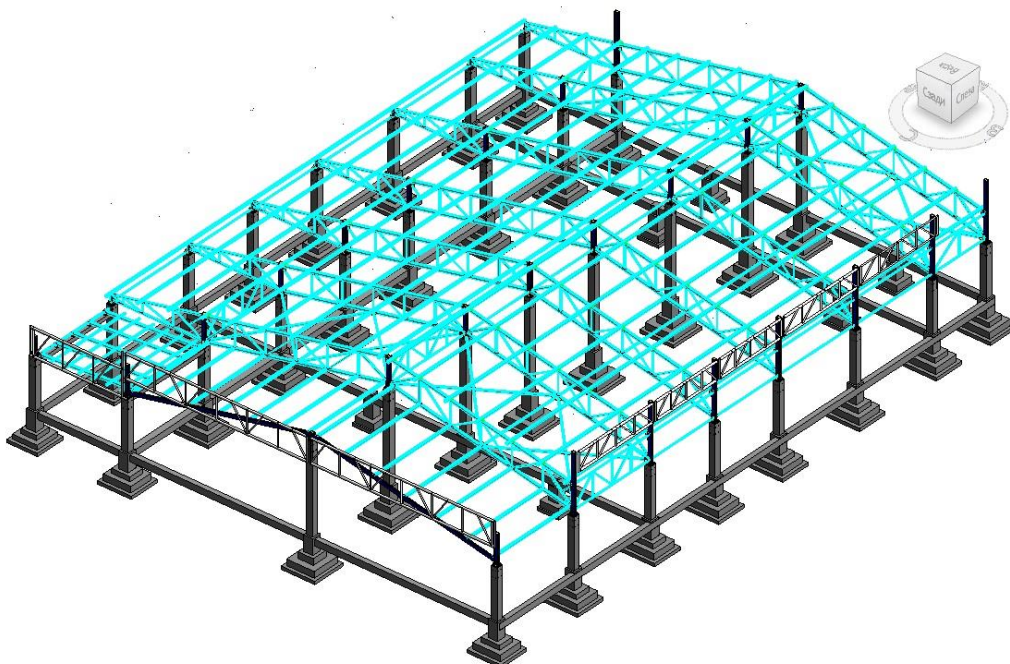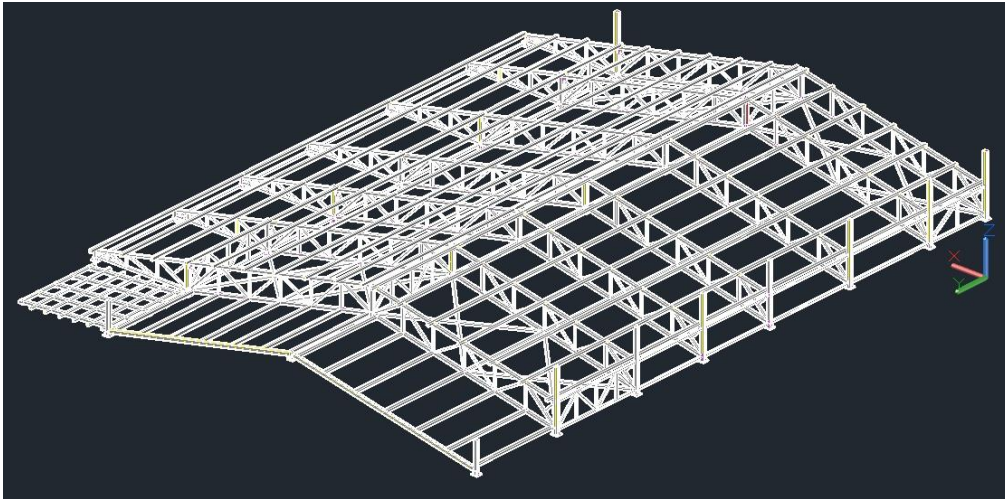
Industrial buildings:
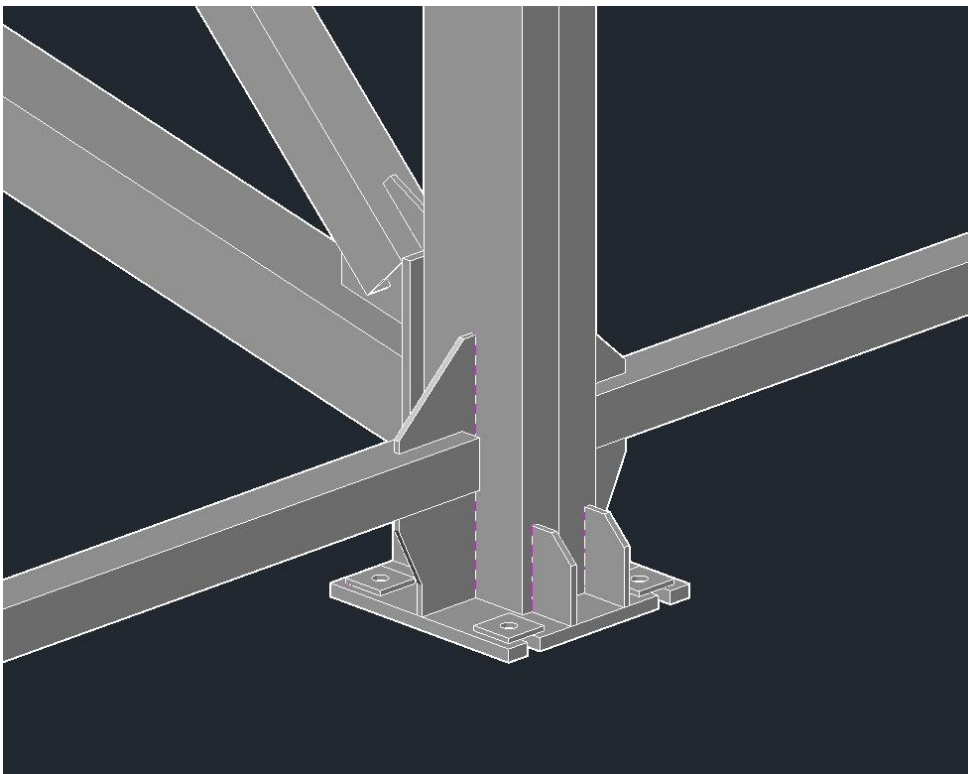
Visual view of the building:

Steel skeleton of the roof frame is imported from AutoCAD structural detailing in the original model Autodesk Revit:

Detailed nodes are developed in AutoCAD structural detailing:

Detailed nodes were developed in AutoCad Structural Detailing:

Detailed design elements of steel constructions in AutoCAD structural detailing: