



REFERENCE PROJECTS

TEQUM CONSULTING  
ENGINEERS

*We are a company of engineers,  
consultants, and technical specialists  
offering multidisciplinary professional services*



TEQUM Sp. z o.o. offers a wide range of services in the field of civil engineering and consulting. We perform the full scope of design in all engineering disciplines: **structure, HVAC, electrical, low voltage** etc., for different types of buildings.

We guarantee optimal and modern design solutions and professional design documentation, delivered on time, which will enable your company a successful realization of the investment.

Quality (**Q** in our logo) is the key factor of our activity.



## RETAIL REFERENCE PROJECTS



## COMMERCIAL REFERENCE PROJECTS



### 2015 – 2017

Location:

Size:

Engineering service:

Scope:

Architects:

Cient:

Status:

### CH Janki - Extension

Warszawa, Poland

80 000 m2

complete engineering design

concept, building permit, tender design, veification of GC execution design

IMB Asymetria Architects

VALAD Poland Sp. z o.o. / Apsys

in progress





COMMERCIAL REFERENCE PROJECTS



**2014 - 2016**

Location:

Size:

Engineering service:

Scope:

Architects:

Cient:

Status:

**Galeria Handlowa - NOWA STACJA - Pruszków**

Warszawa, Poland

26 000 m2 GLA

complete engineering design

concept, building permit, tender design, author's supervision.

IMB Asymetria

ECC Real Estate

in progress



COMMERCIAL REFERENCE PROJECTS



**2012 – 2015**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Wroclavia**

Wrocław, Poland

198 000 m<sup>2</sup>

complete engineering design,  
concept, building permit, tender and execution design, author's supervision,  
A360 for General Contractor Services

IMB Asymetria Architects

Unibail Rodamco

in progress





COMMERCIAL REFERENCE PROJECTS



**2013 - 2014**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Navigator**

Mielec, Poland

35 000 m2

complete engineering design,  
concept, building permit design

SOON Architects

Rank Progress

built



COMMERCIAL REFERENCE PROJECTS



**2009 - 2013**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Warmińska**

Olsztyn, Poland

116 500 m<sup>2</sup>

complete engineering design

concept, building permit, tender, execution design, author's supervision

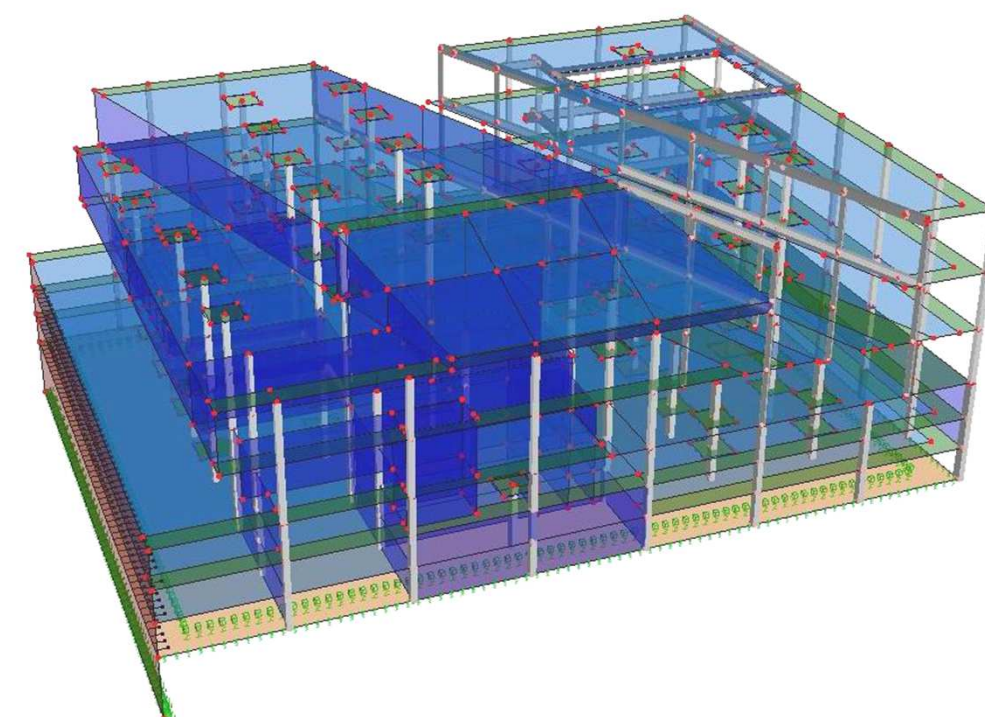
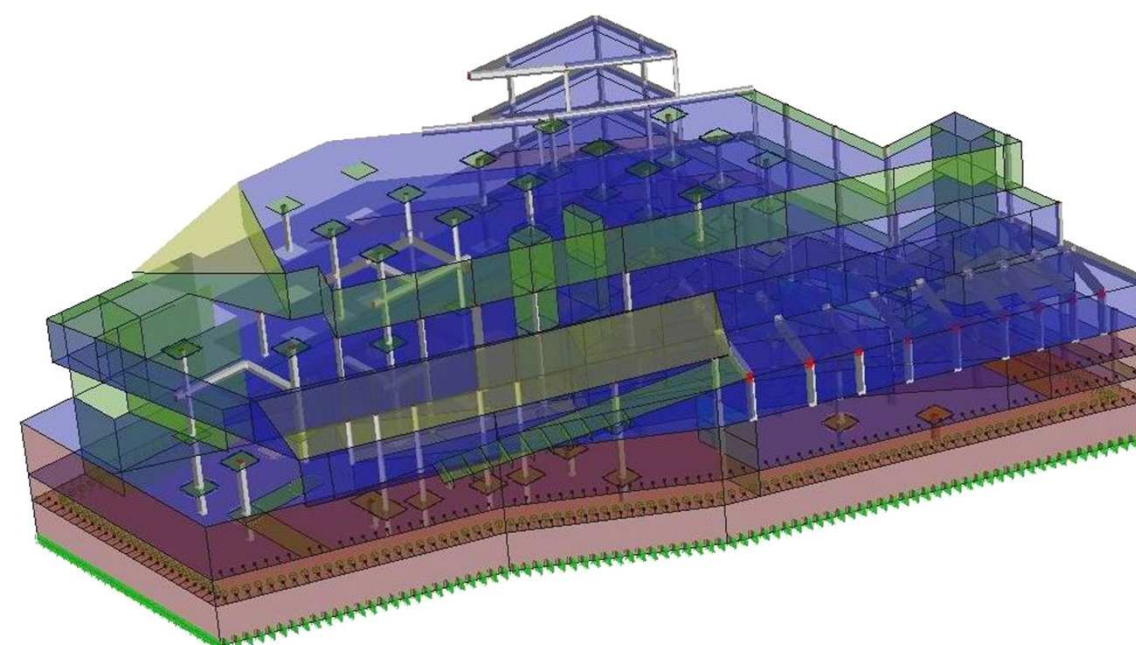
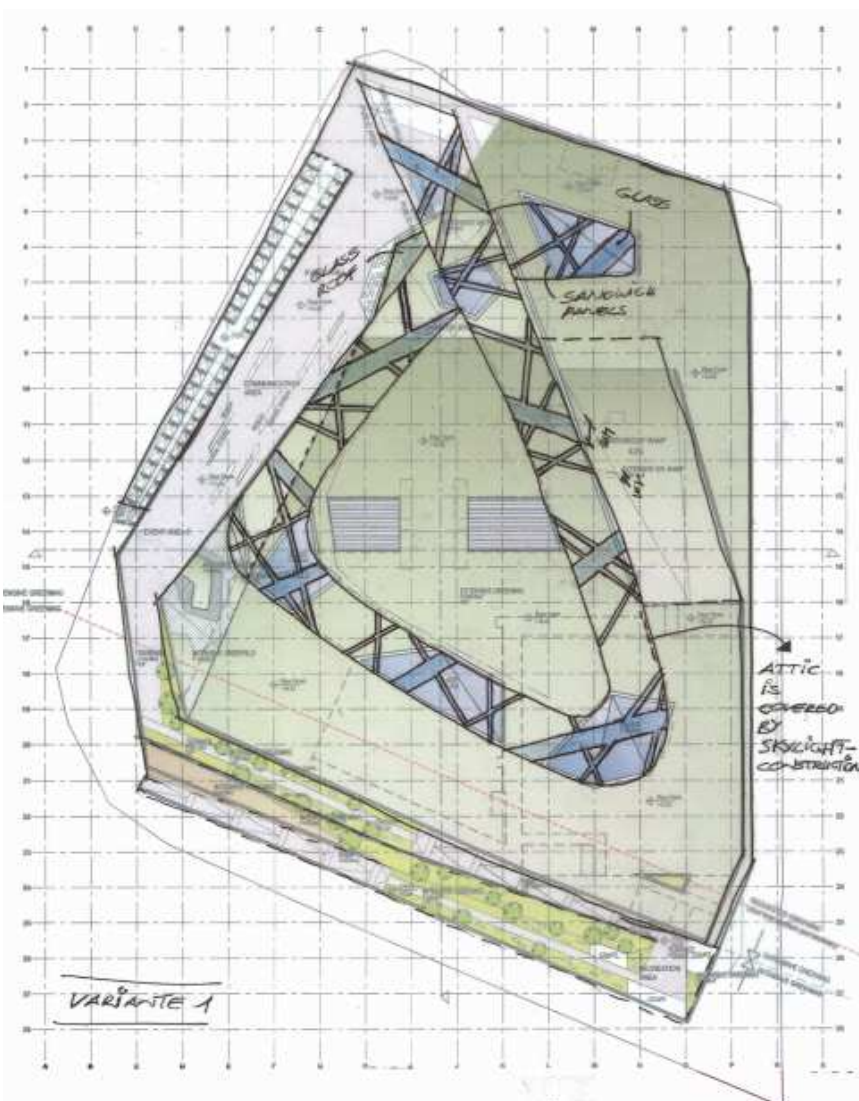
Kuryłowicz & Associates Architecture Studio

Libra Project

built



COMMERCIAL REFERENCE PROJECTS



**2011 – 2014**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Tarasy Zamkowe**

Lublin, Poland

115 000 m<sup>2</sup>

complete engineering design

tender design documentation, verification of GC execution design

Stelmach & Partners, ATP Wien

Immofinanz AG

built



COMMERCIAL REFERENCE PROJECTS



**2012**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Centrum Galardia**

Starachowice, Poland

45 000 m2

complete engineering design

concept design, building permit and tender, verification of GC execution design, supervision

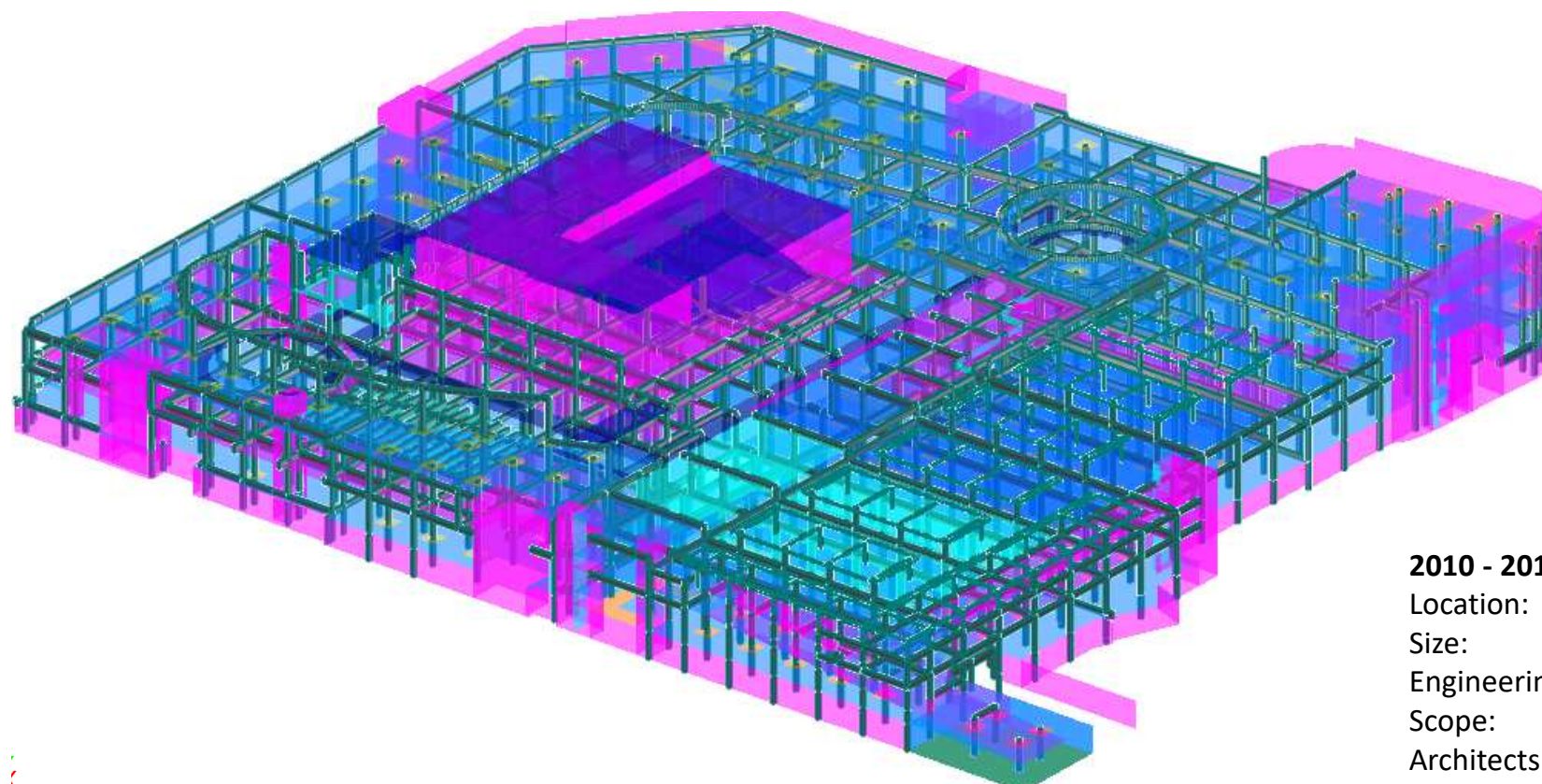
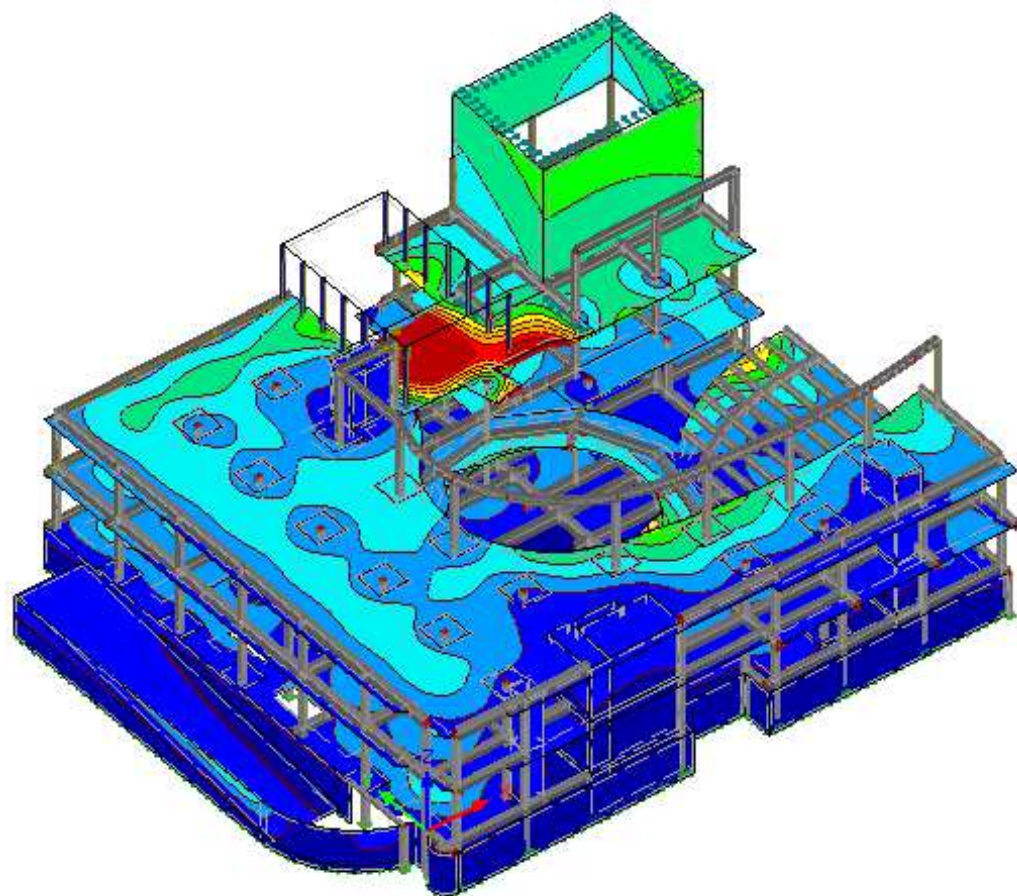
IMB Asymetria

Balmain Asset Management

built



COMMERCIAL REFERENCE PROJECTS



**2010 - 2011**

Location:

Size:

Engineering service:

Scope:

Architects:

Building permit&tender:

Client:

Status:

**Galeria Amber**

Kalisz, Poland

84 000 m<sup>2</sup>

complete engineering design

concept, building permit and tender

Concept: Bose International

Artur Jasiński i Wspólnicy Biuro Architektoniczne Sp. z o.o.

Echo Investment S.A.

built



COMMERCIAL REFERENCE PROJECTS



**2010 - 2011**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Auchan - Galeria Bronowice**

Kraków, Poland

135 000 m<sup>2</sup>

complete engineering design

concept, building permit and tender

Concept: Bose International

Building permit & tender: BRK S.A.

Auchan, Immochan

built



COMMERCIAL REFERENCE PROJECTS



**2010 - 2011**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Futura Park / Factory Outlet**

Modlniczka, Poland

85 000 m<sup>2</sup>

complete engineering design, infrastructure execution, design

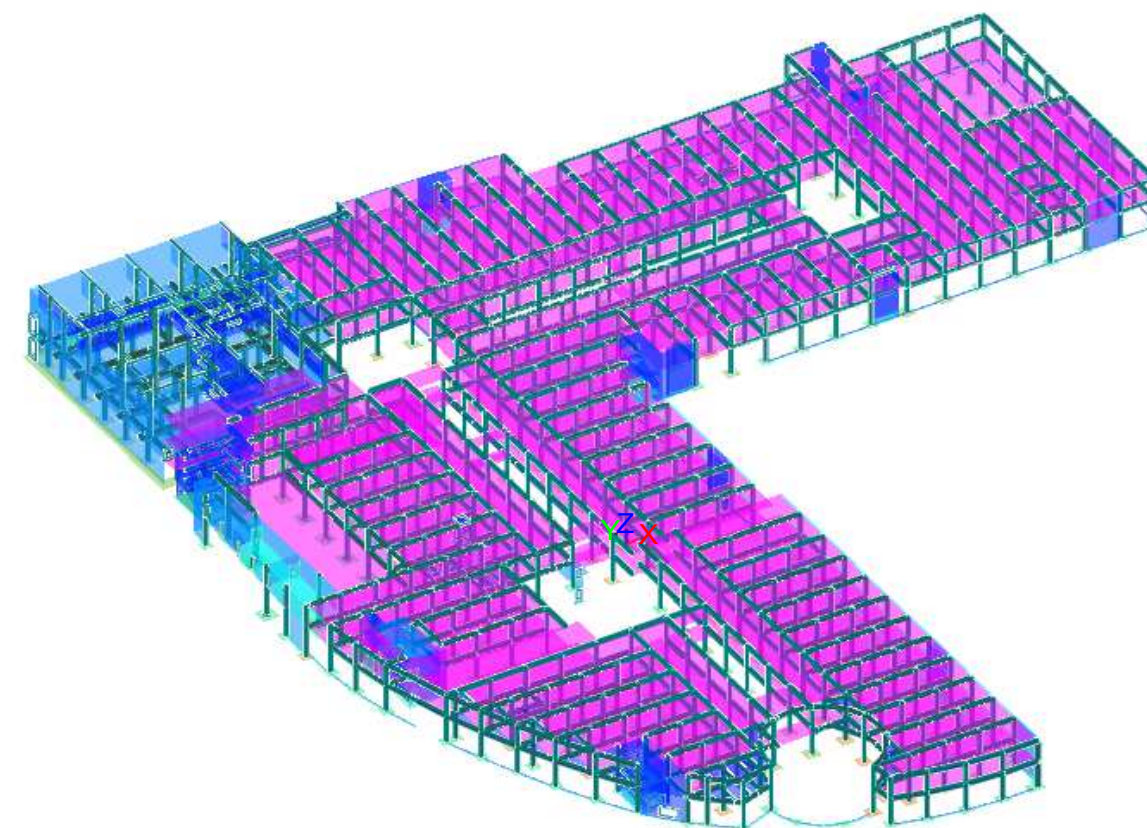
IMB Asymetria

Hochtief S.A. / Neinver

built



COMMERCIAL REFERENCE PROJECTS



**2010 - 2011**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Plaza**

Toruń, Poland

85 000 m2

structures

execution design

IMB Asymetria

Plaza Centers

built



COMMERCIAL REFERENCE PROJECTS

**2009 - 2012**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Agata furniture store**

Kraków, Poland

20 500 m<sup>2</sup>

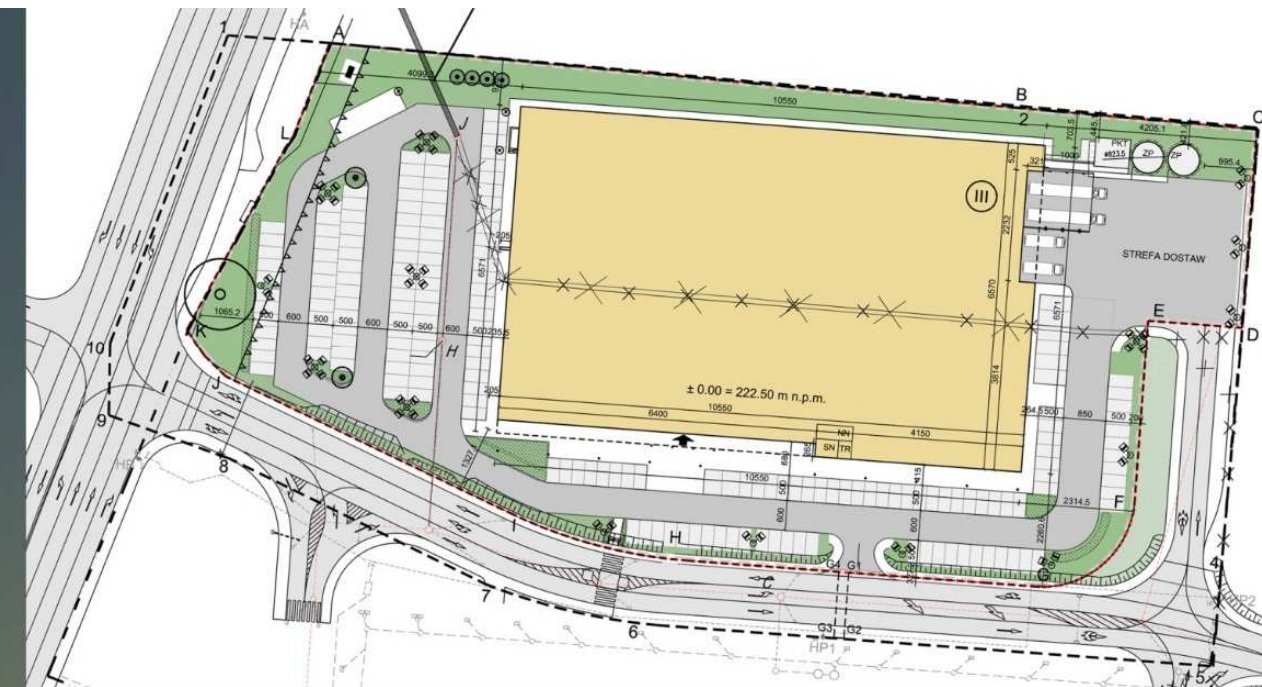
complete engineering design

concept, building permit, execution, supervision

IMB Asymetria

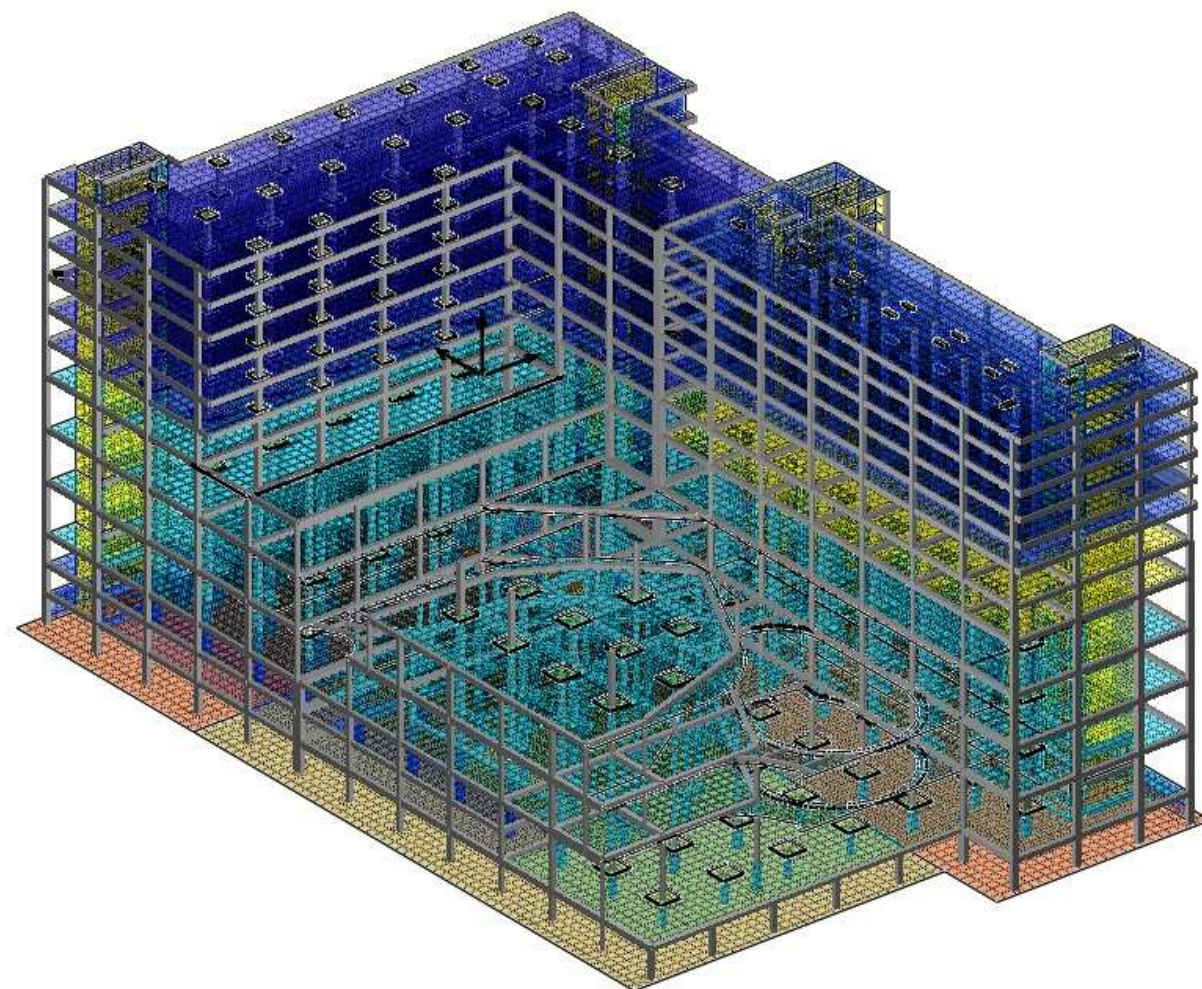
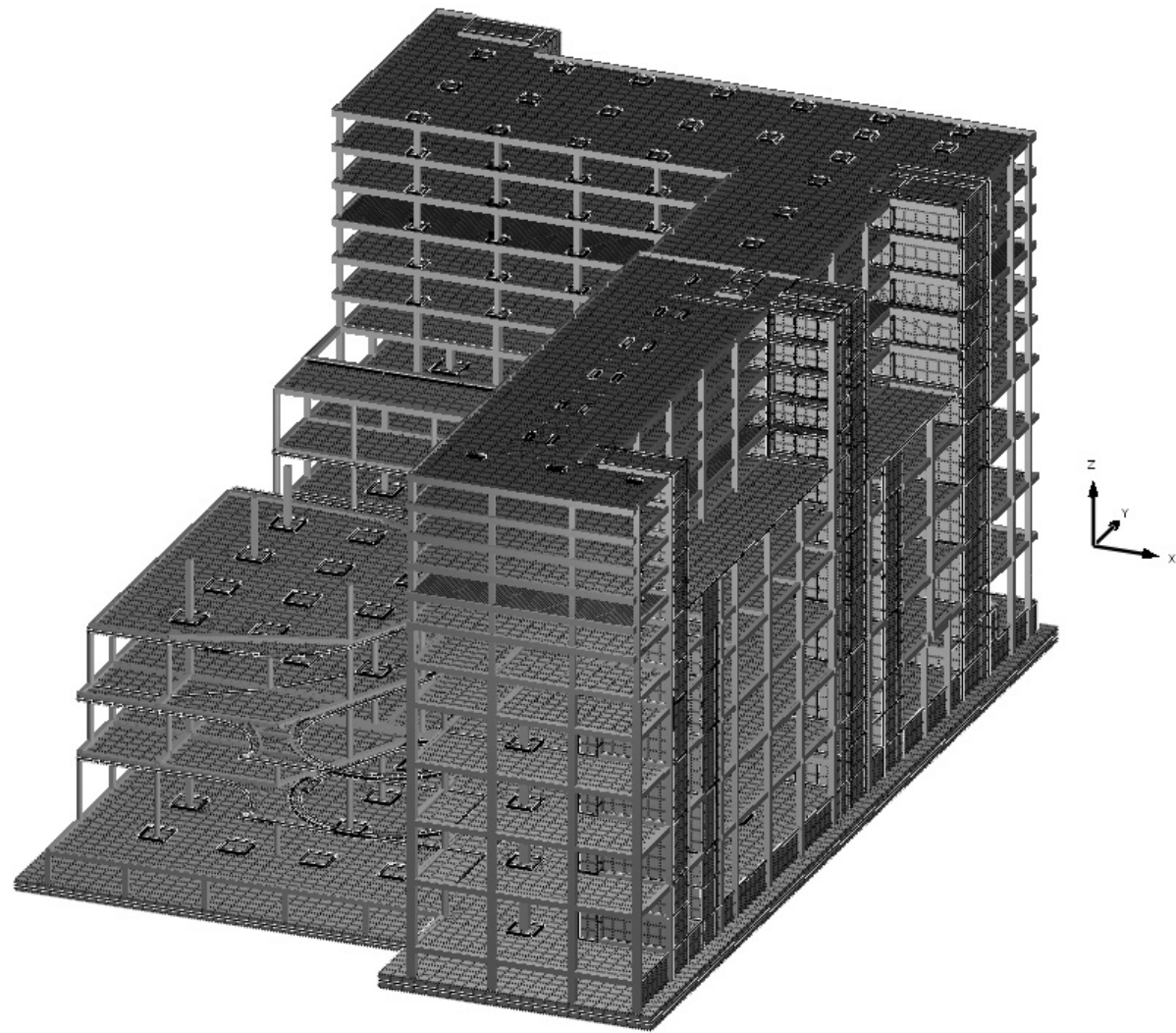
Agata Meble

built





COMMERCIAL REFERENCE PROJECTS



**2008 - 2010**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Business Center Sukcesja**

Łódź, Poland

165 000 m2, shopping center + hotel + office building

complete engineering design, infrastructure

concept and building permit

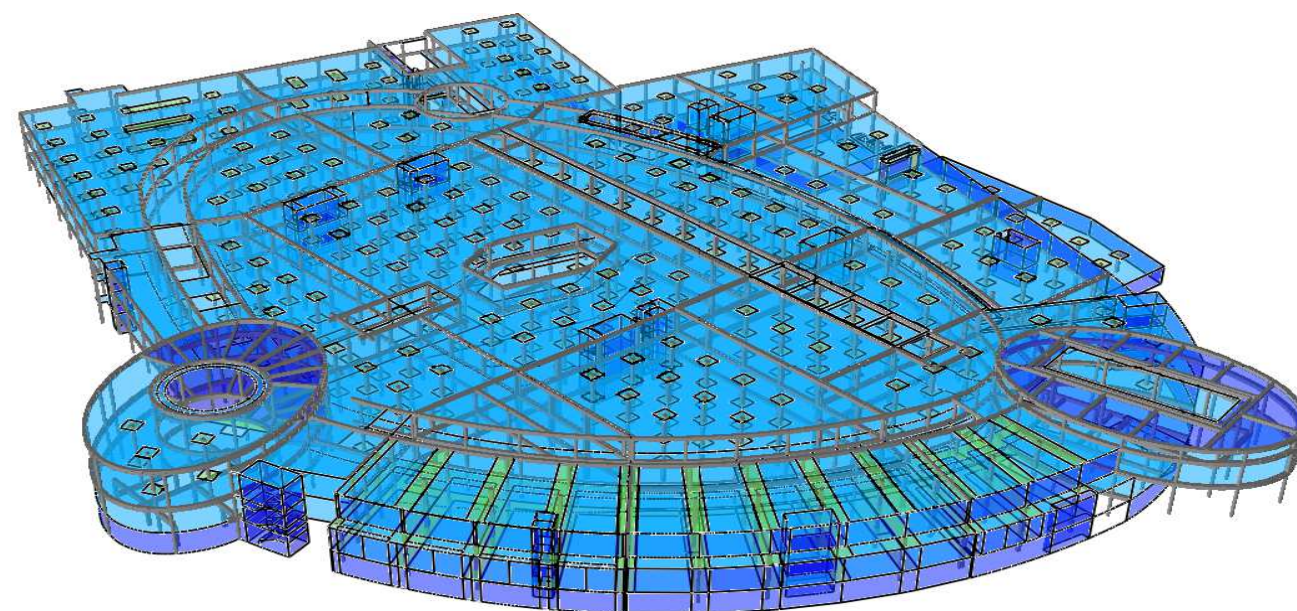
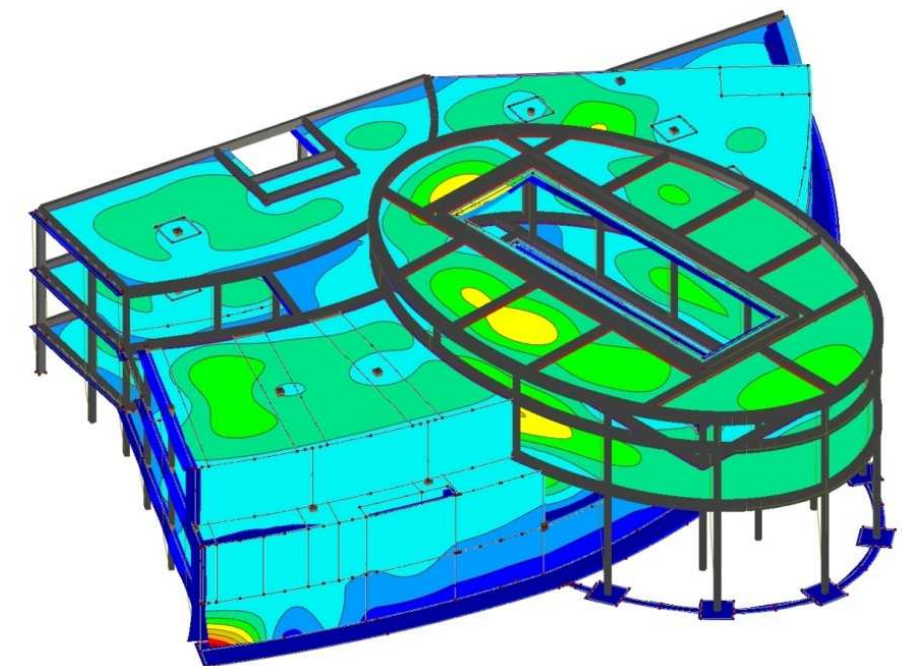
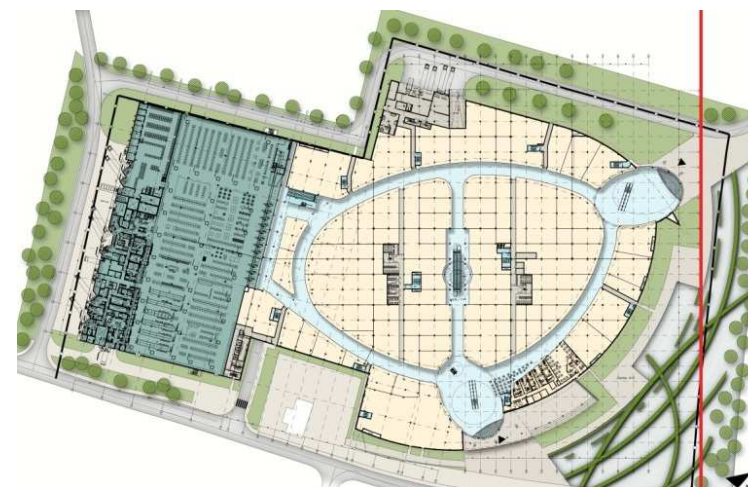
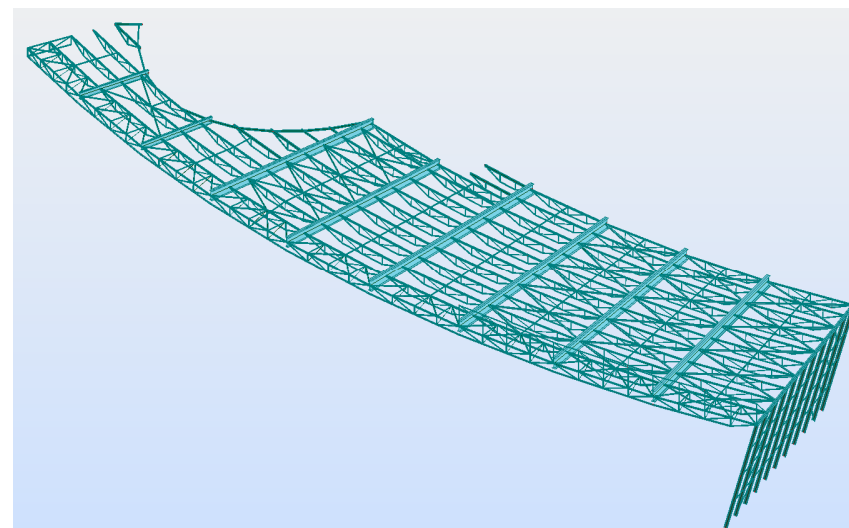
Hermanowicz Rewski Architects

Fabryka Biznesu

completed



COMMERCIAL REFERENCE PROJECTS



**2008 - 2009**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Sadecka**

Nowy Sącz, Poland

110 000 m<sup>2</sup>

complete engineering design, infrastructure

building permit, tender

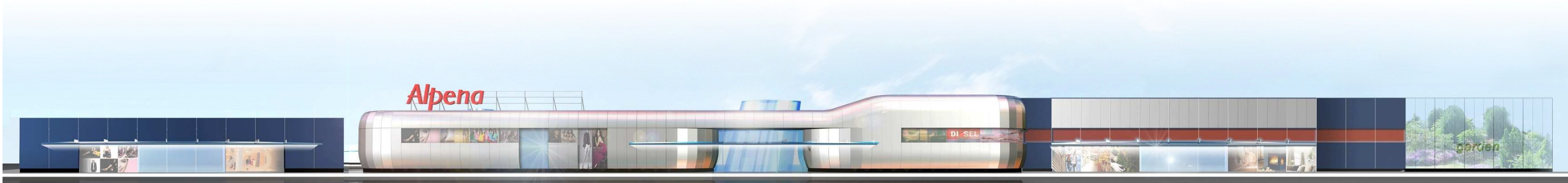
IMB Asymetria

Newag S.A.

completed



COMMERCIAL REFERENCE PROJECTS



**2008 - 2009**

Location:

Size:

Engineering service:

Scope:

Architects:

Client:

Status:

**Galeria Alpena**

Nowy Sącz, Poland

45 000 m<sup>2</sup>

complete engineering design, infrastructure

concept and building permit,

IMB Asymetria

Sandbanks

completed



## BIM space

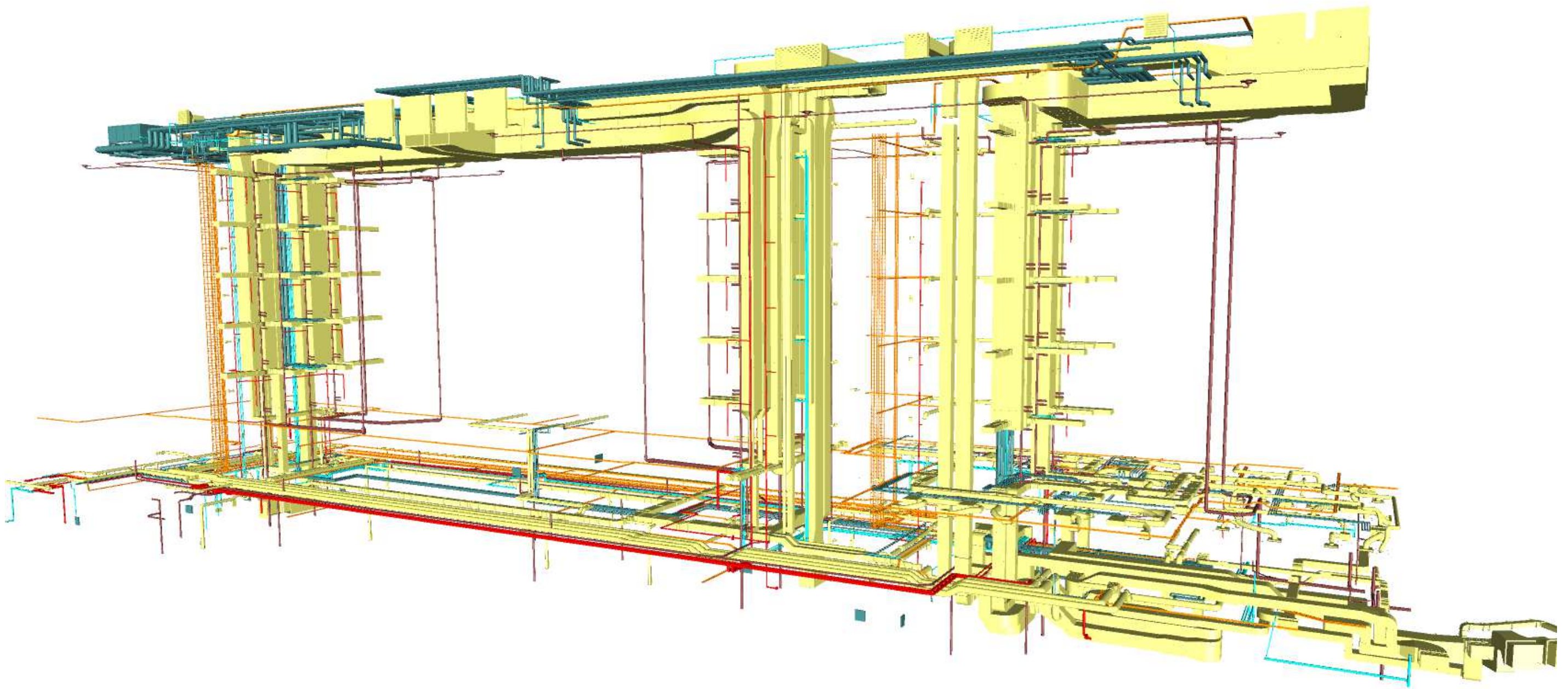
- 3d Modelilng – Structure, MEP
- Multi-discipline Coordination
- Material Takeoff
- Openings Coordination
- BIM – MES model export/import
- Timeline Schedule,
- RevitServer – cooperation and coordination in real-time
- Clash Detection
- A360 Model 3d On Site

## BIM Development Scale

- **LOD 100** — The model element may be graphically represented in the model with a symbol or other generic representation, but does not satisfy the requirements for LOD 200. Information related to the model element (i.e., cost/sf, tonnage of HVAC, etc.) can be derived from other model elements.
- **• LOD 200** — The model element is graphically represented within the model as a generic system, object, or assembly with approximate quantities, size, shape, location, and orientation. Nongraphic information may also be attached to the model element.
- **• LOD 300** — The model element is graphically represented within the model as a specific system, object, or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the model element.
- **• LOD 350** — The model element is graphically represented within the model as a specific system, object, or assembly in terms of quantity, size, shape, orientation, and interfaces with other building systems. Nongraphic information may also be attached to the model element.
- **• LOD 400** — The model element is graphically represented within the model as a specific system, object, or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Nongraphic information may also be attached to the model element.

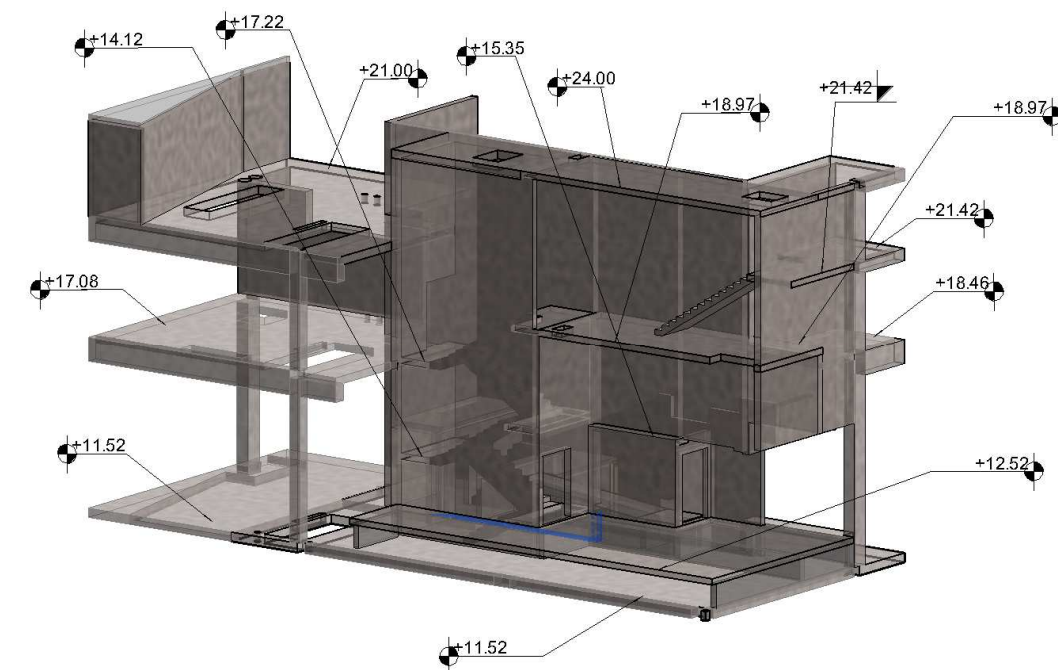
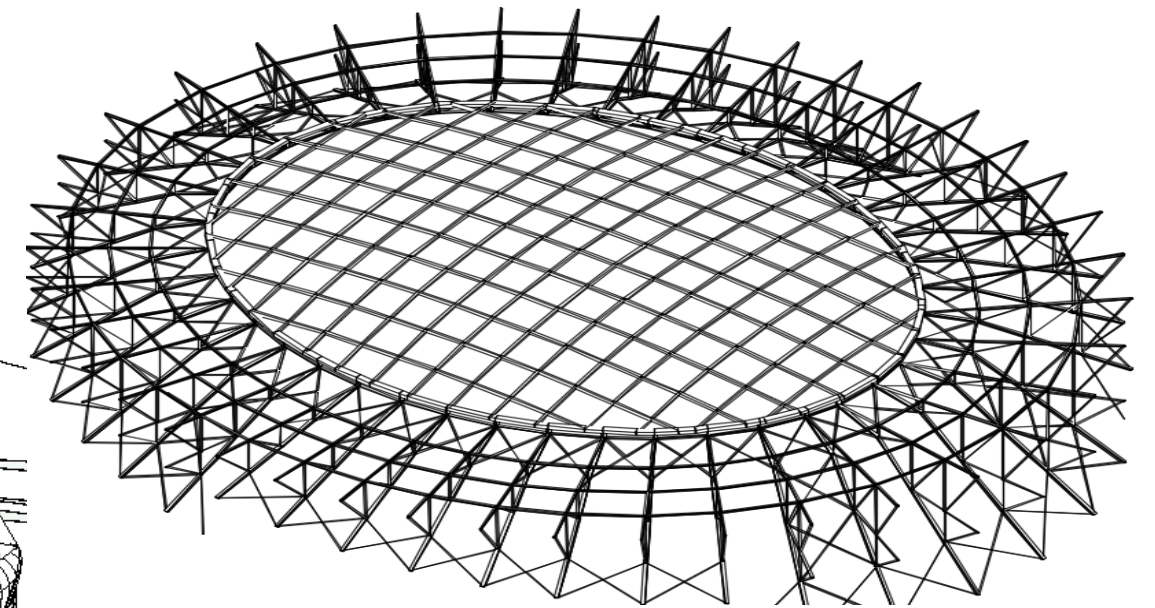
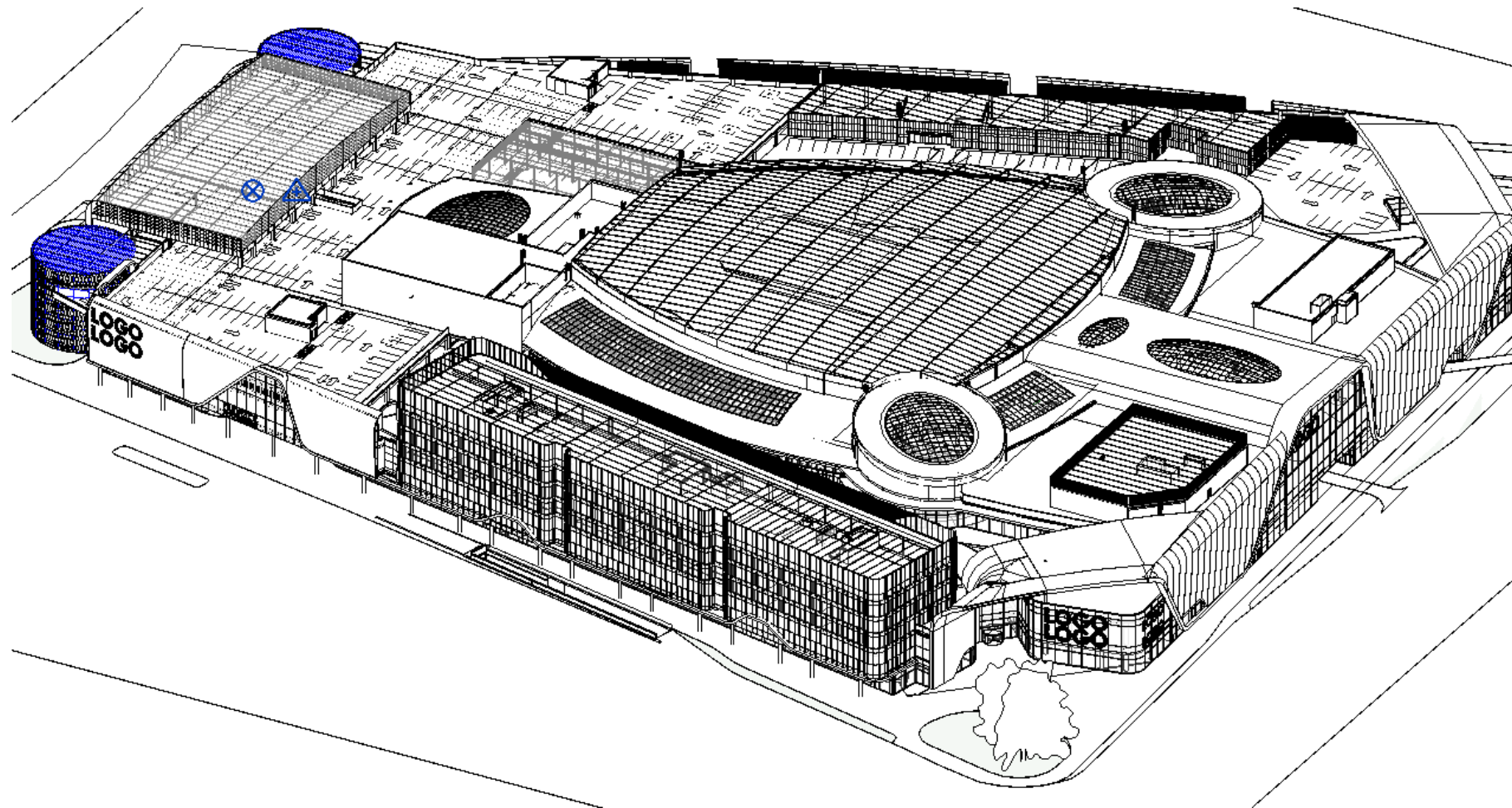


- Model 3d – MEP



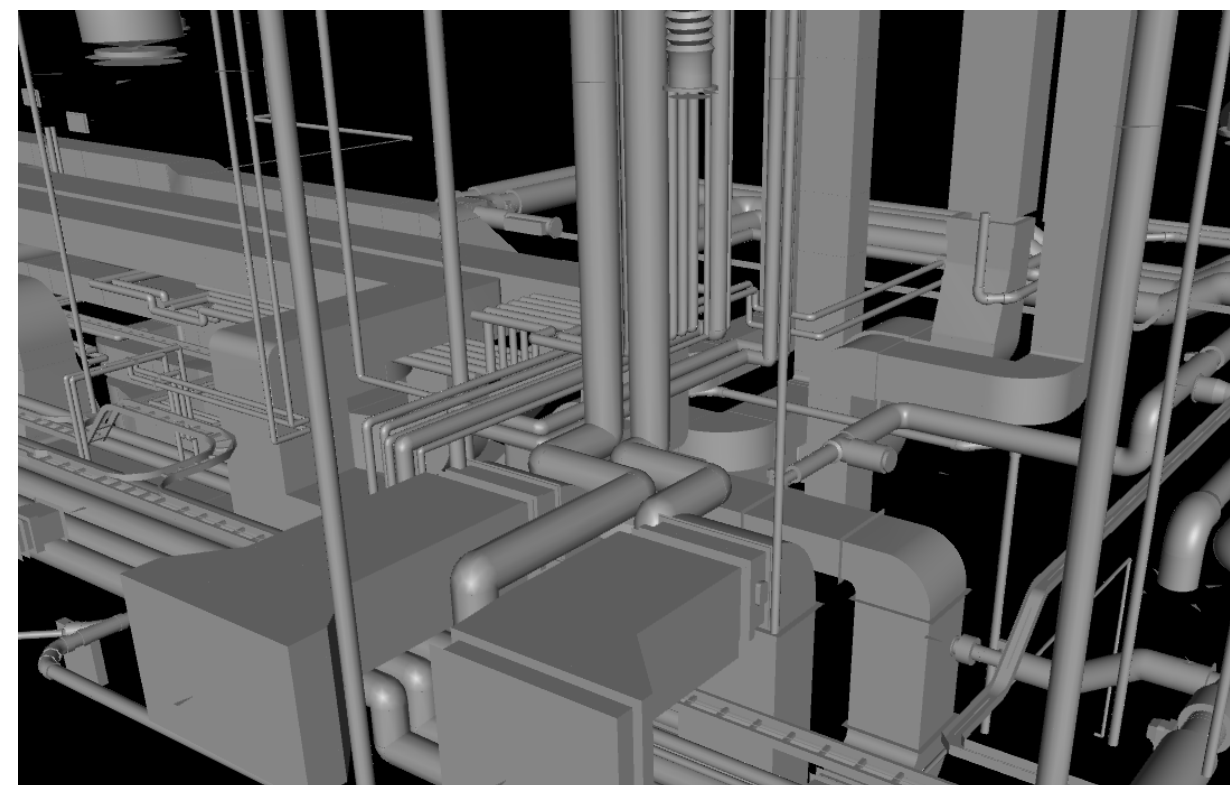
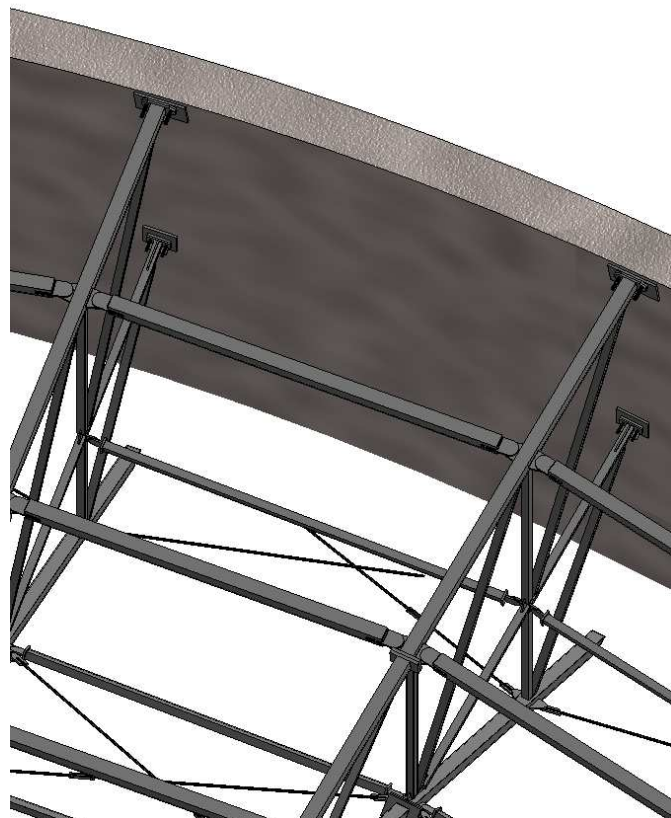
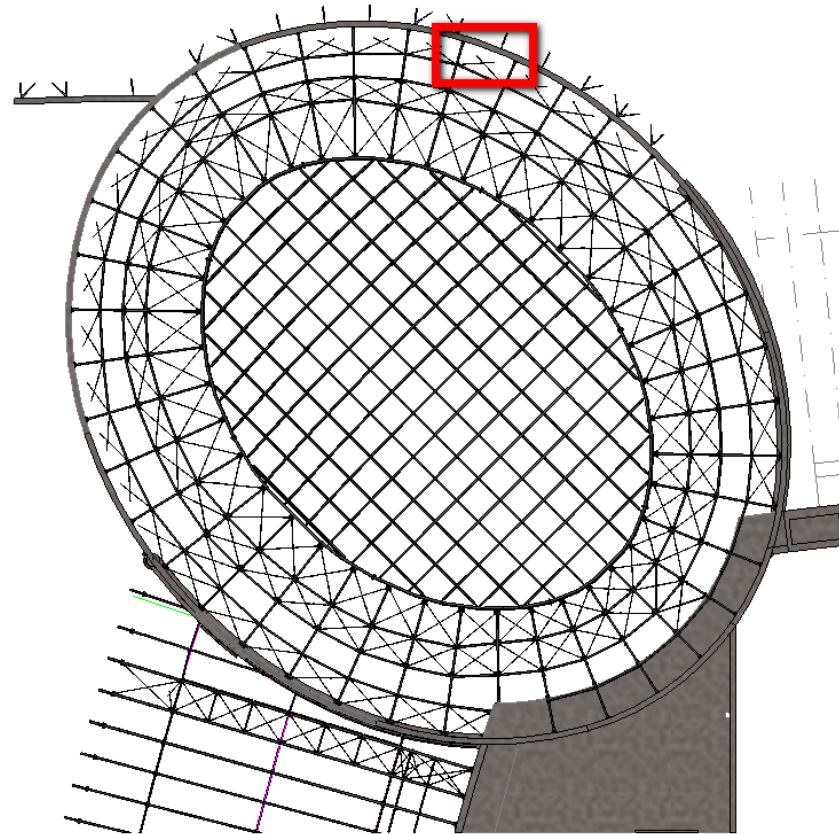


- Model 3d – Structure



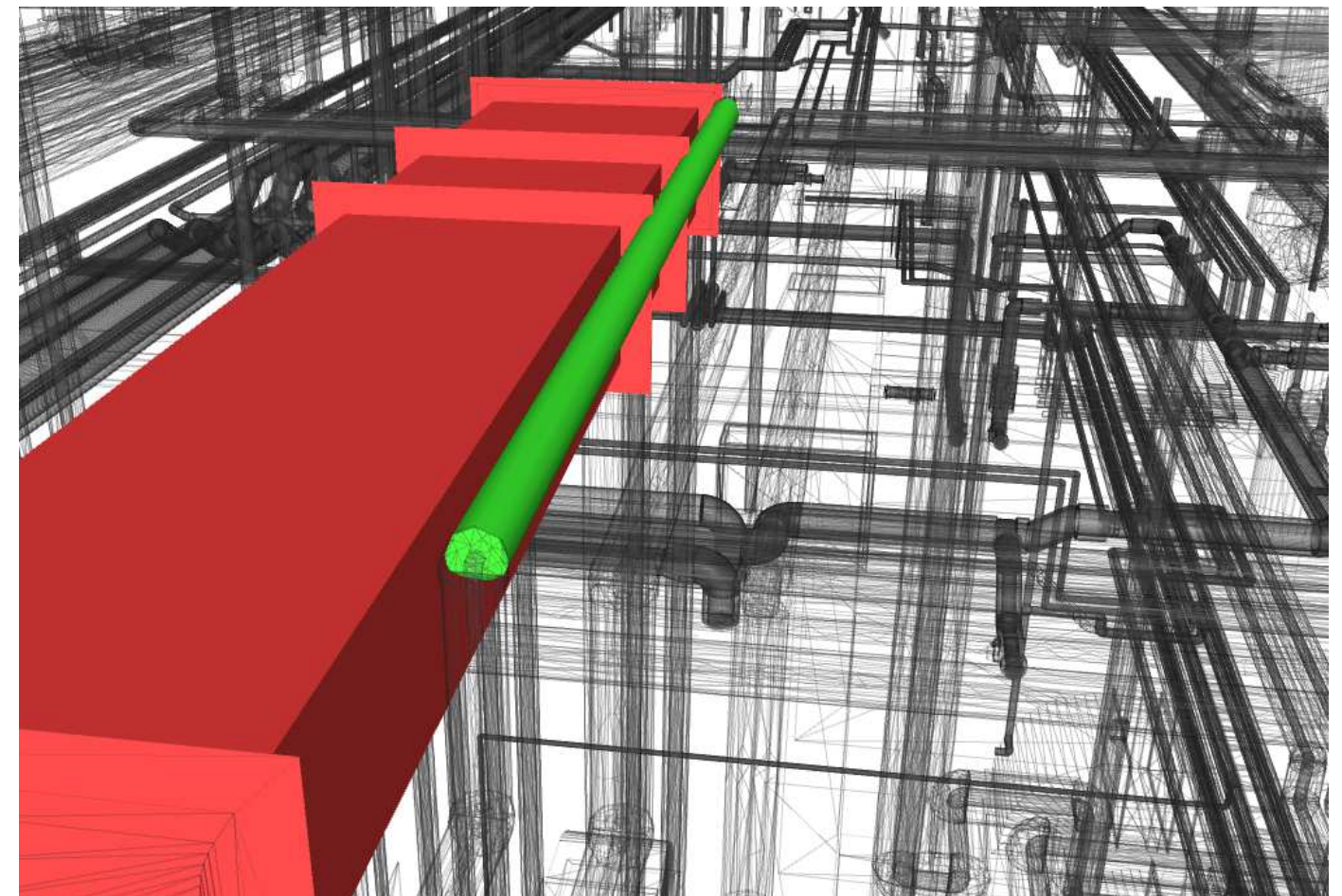
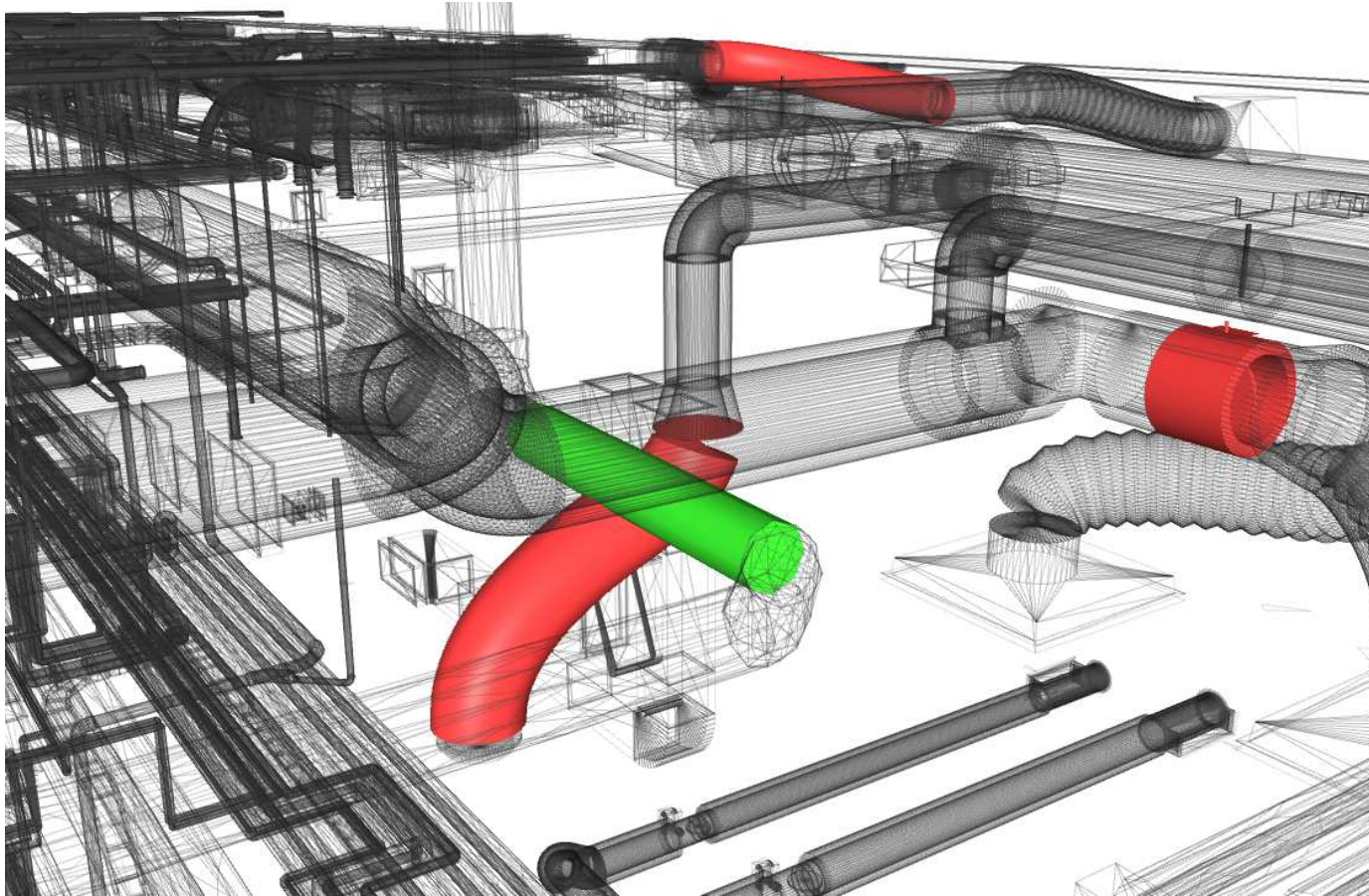


- Model 3d – Multi-discipline coordination



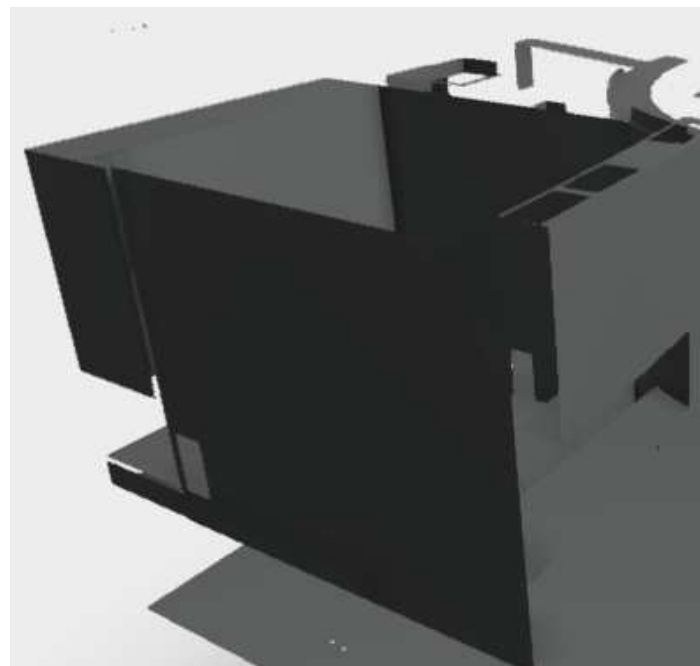


- Model 3d – Clash Detection





- Model 3d – Model on Site using A360



**A360 VIEWER**

Upload > SEG06\_20160420.rvt

SEG06\_20160420.rvt

Views

3D View

3D

Arkusze

KL10 całość - KLATKA KL10 - poz -2 do poz +4

2100\_ED\_TQ\_SR\_WAST\_B2\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_WAST\_GF\_XXXX\_GN\_XXX\_SAI

xxx - Rzut poziomy -1, seg. 06

2100\_ED\_TQ\_SR\_GNSR\_B2\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_B2\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_B1\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_GF\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_F1\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_F2\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_WAST\_F1\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_WAST\_F2\_XXXX\_GN\_XXX\_SAI

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2100\_ED\_TQ\_SR\_WAST\_F2\_XXXX\_CC\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_F3\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_F4\_XXXX\_GN\_XXX\_SAI

2100\_ED\_TQ\_SR\_GNSR\_F2\_XXXX\_CC\_XXX\_SAI

RfC\_229\_DEX\_zmiana\_belek - Unnamed

RfC\_259\_Winda\_PiC\_miejsce - Unnamed

2100\_ED\_TQ\_SR\_WAST\_F3\_XXXX\_GN\_XXX\_SAI

ZARA\_przesuniecie\_windy - Unnamed

PODKŁAD - Fundament pod drzwi obrotowe - pozi

Szalunki ścian nadubowy F4 - Unnamed

Sala nr 2-Widok z góry na poziom +11.62

Sala nr 2-Widok z dołu na podłogę podniesioną

Sala nr 2-Widok z dołu na strop projektorowni

Sala nr 2-Widok z dołu na stropodach nad salą

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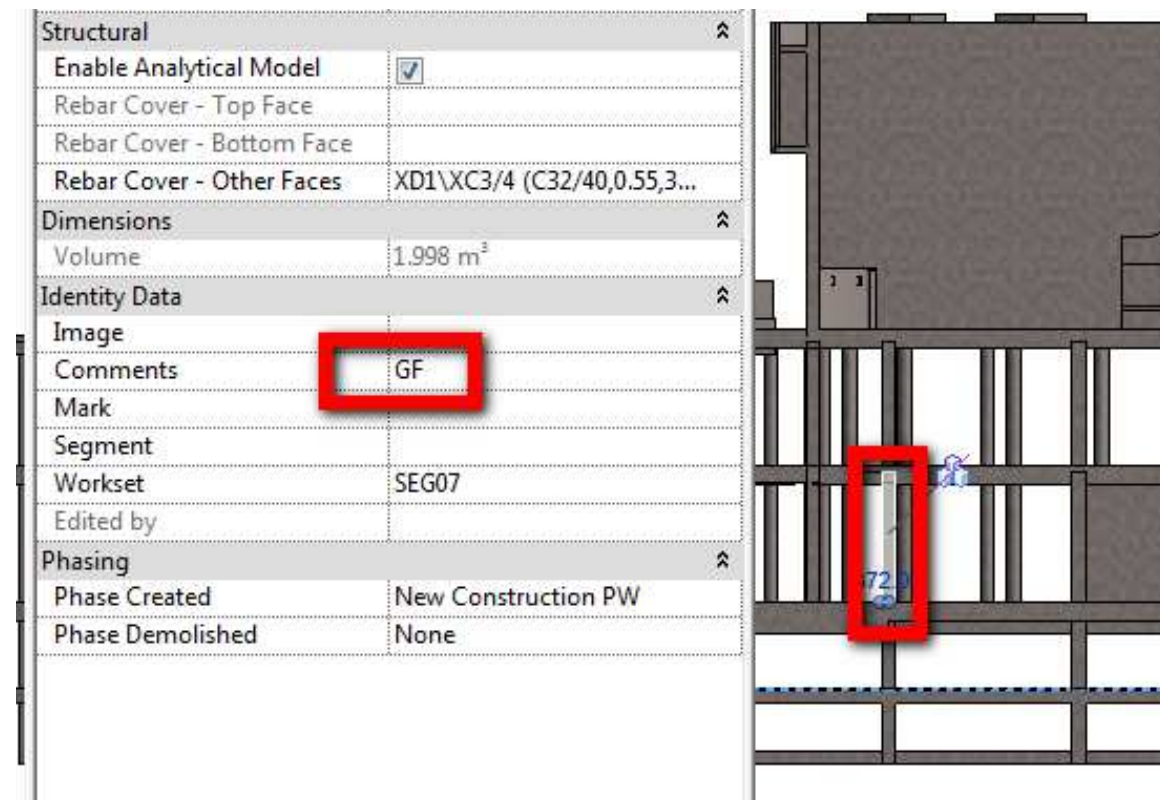
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BIM IN OUR DESIGN

- Model 3d – Material Takeoff



Modify Schedule/Quantities

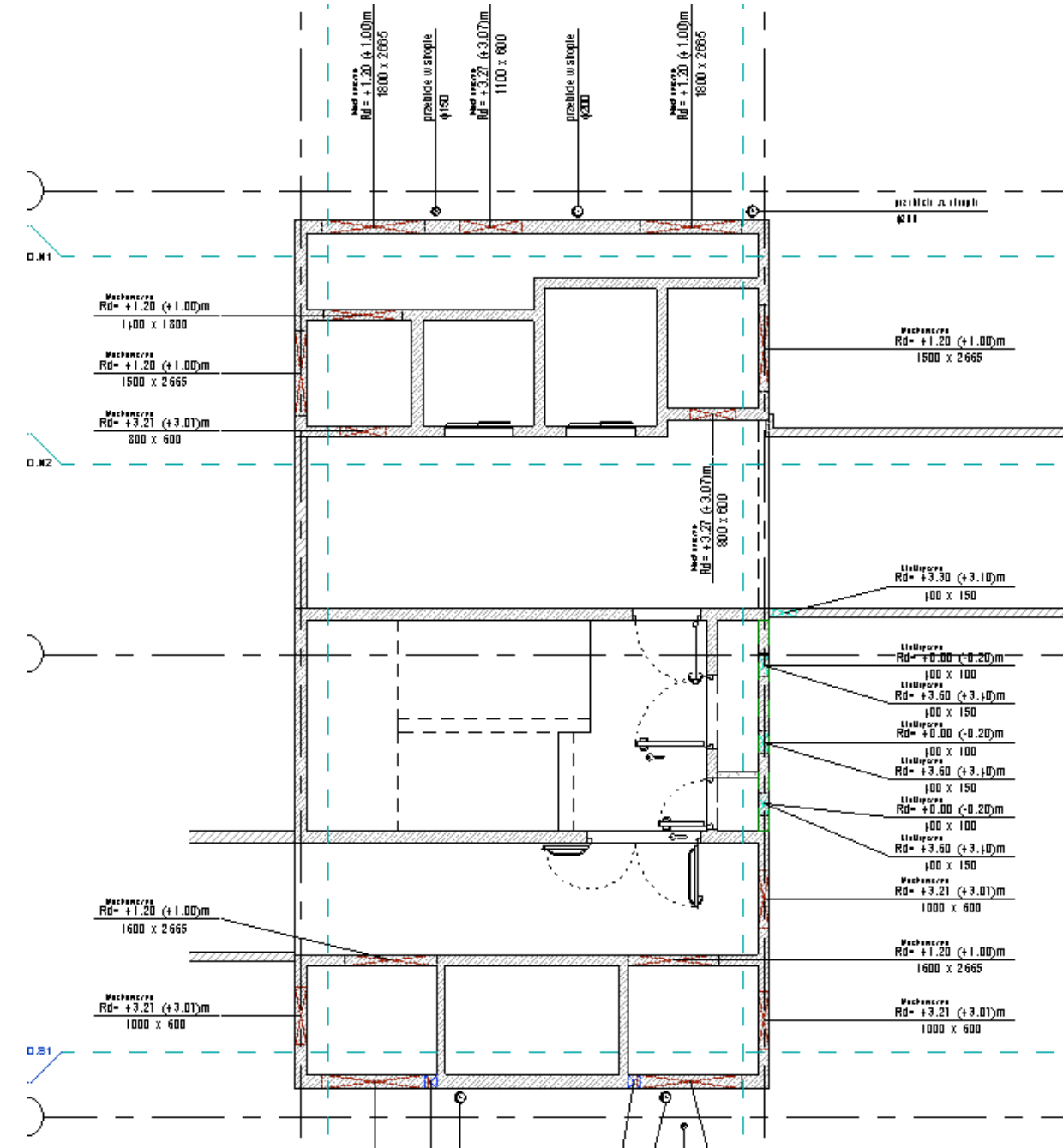
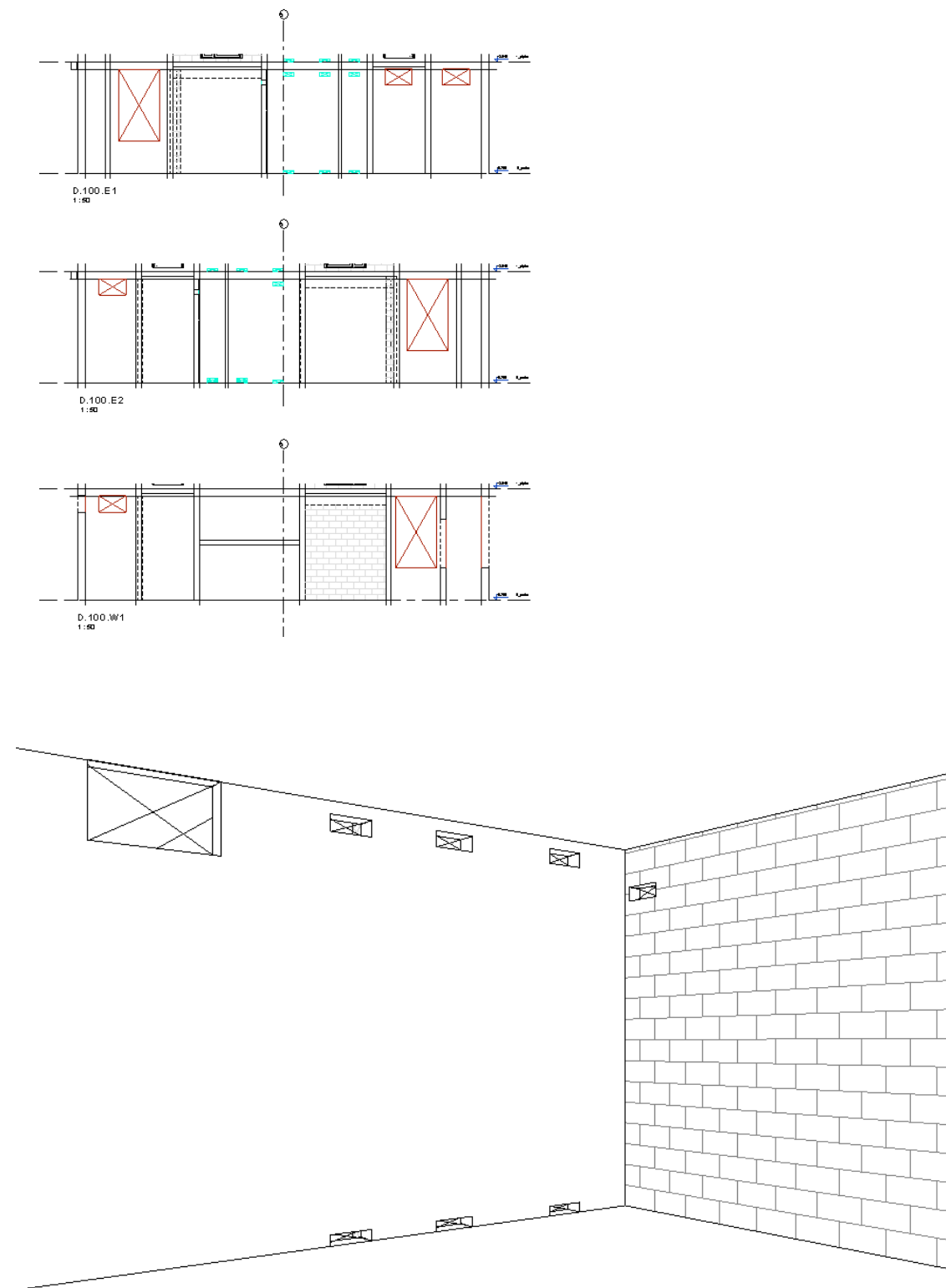
<Each Beams-above B1>

A	B	C	D	E	F	G	H	I	J	K
Beam cross	Comments	Count	height belo	Beam	Beam wid	Length	Volume - Revit	Volume - calculate	Volume_below_sla	Estimated volume_
300x800	above B1	1	550	800	300	1890	0.24 m³	0.45 m³	0.31 m³	0.10 m³
300x800	above B1	1	550	800	300	1890	0.24 m³	0.45 m³	0.31 m³	0.10 m³
420x800	above B1	1	550	800	420	64100	13.55 m³	21.54 m³	14.81 m³	0.14 m³
600x600	above B1	1	350	600	600	8100	1.58 m³	2.92 m³	1.70 m³	0.13 m³
600x800	above B1	1	550	800	600	8100	2.29 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	8100	2.36 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	5519	1.95 m³	2.65 m³	1.82 m³	0.20 m³
600x800	above B1	1	550	800	600	8100	2.44 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	8100	2.44 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	7780	2.31 m³	3.73 m³	2.57 m³	0.20 m³
600x800	above B1	1	550	800	600	7780	2.30 m³	3.73 m³	2.57 m³	0.20 m³
600x800	above B1	1	550	800	600	7780	2.31 m³	3.73 m³	2.57 m³	0.20 m³
600x800	above B1	1	550	800	600	8100	2.44 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	8100	2.44 m³	3.89 m³	2.67 m³	0.20 m³
600x800	above B1	1	550	800	600	8845	2.61 m³	4.15 m³	2.85 m³	0.20 m³

Schedules/Quantities
Beams-above B1_TOTAL
Beams-above B2_TOTAL
Beams-above F1_TOTAL
Beams-above F2_TOTAL
Beams-above F3_TOTAL
Beams-above F4_TOTAL
Beams-above GF_TOTAL
Each Beams-above B1
Each Beams-above B2
Each Beams-above F1
Each Beams-above F2
Each Beams-above F3
Each Beams-above F4
Each Beams-above GF
Flights B1
Flights B2
Flights F1
Flights F2
Flights F3
Flights F4
Flights GF
Landings Schedule - B1
Landings Schedule - B2
Landings Schedule - F1
Landings Schedule - F2
Landings Schedule - F3
Landings Schedule - F4
Landings Schedule - F5
Landings Schedule - GF
Slab Schedule - above B1
Slab Schedule - above B2
Slab Schedule - above F1
Slab Schedule - above F2
Slab Schedule - above F3
Slab Schedule - above F4
Slab Schedule - above F5
Slab Schedule - above GF



- Model 3d – Openings coordination







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