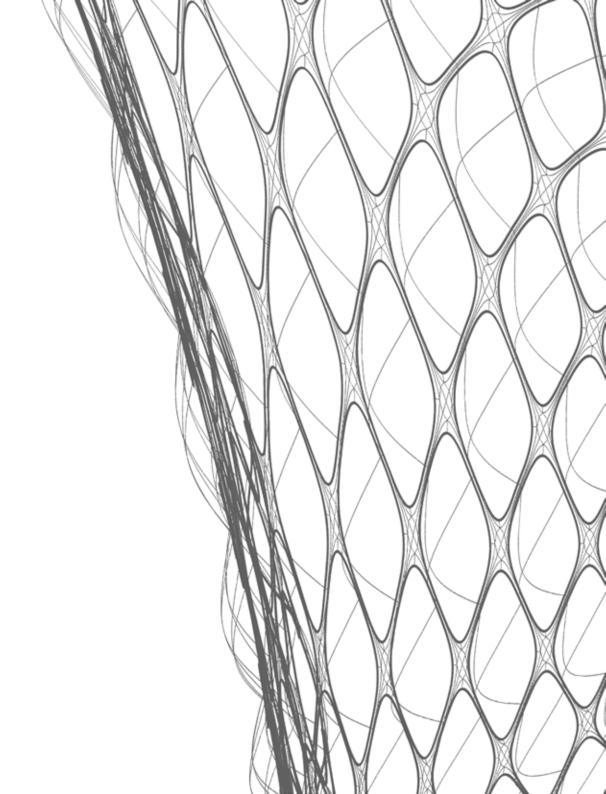
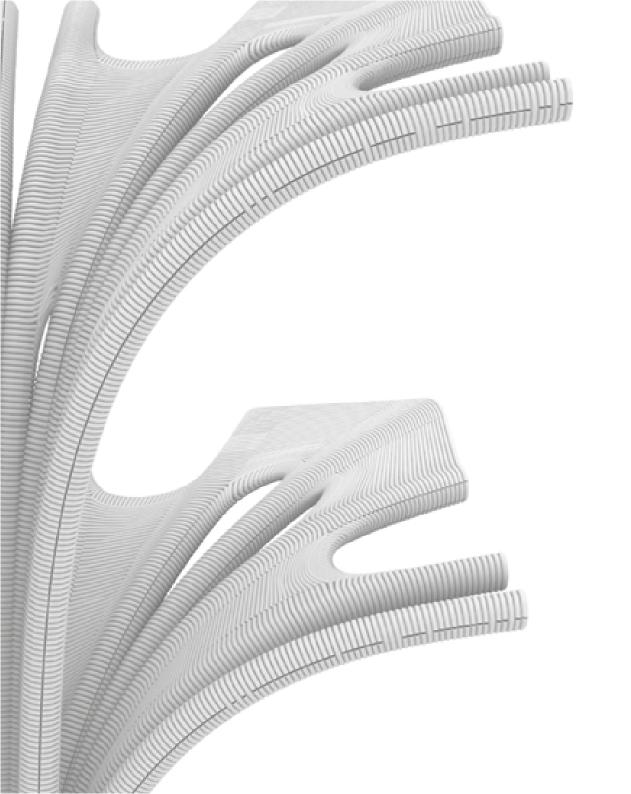


1	AADRL Projects
2	BArch Selected Works
3	Professional/ Free-Lance Work
4	MAYA Modelling





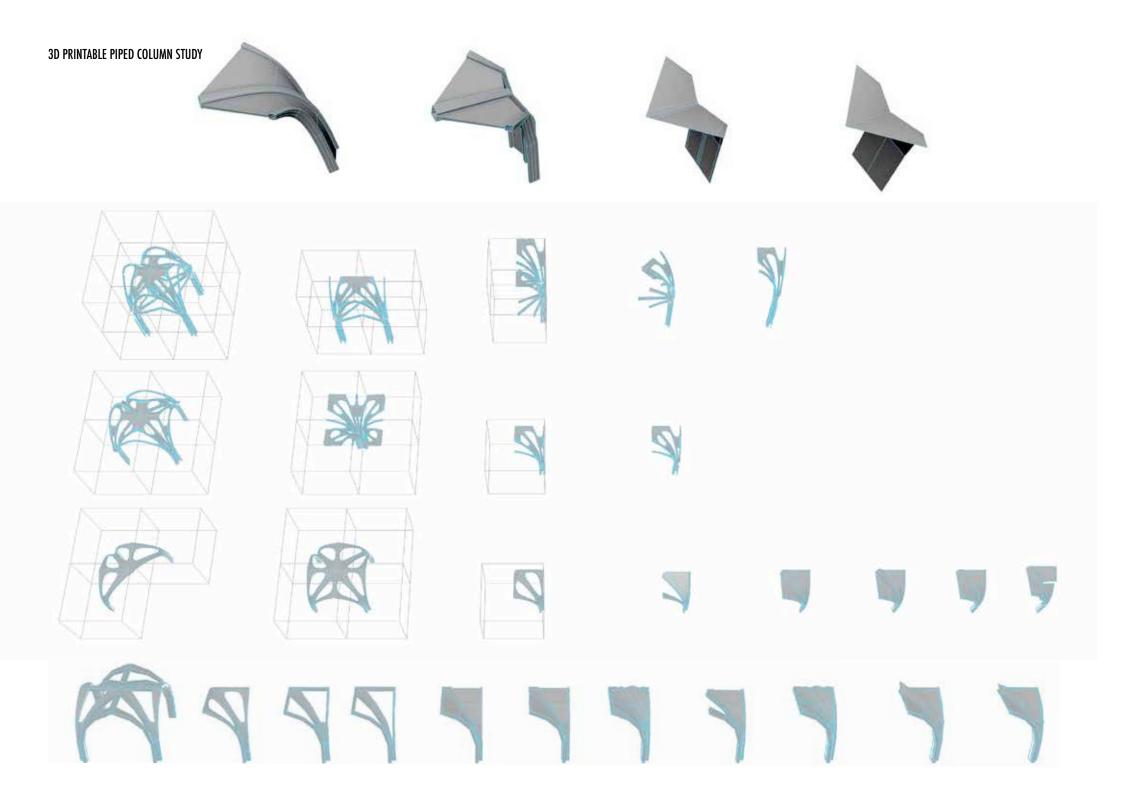
// AADRL STUDIO WORK

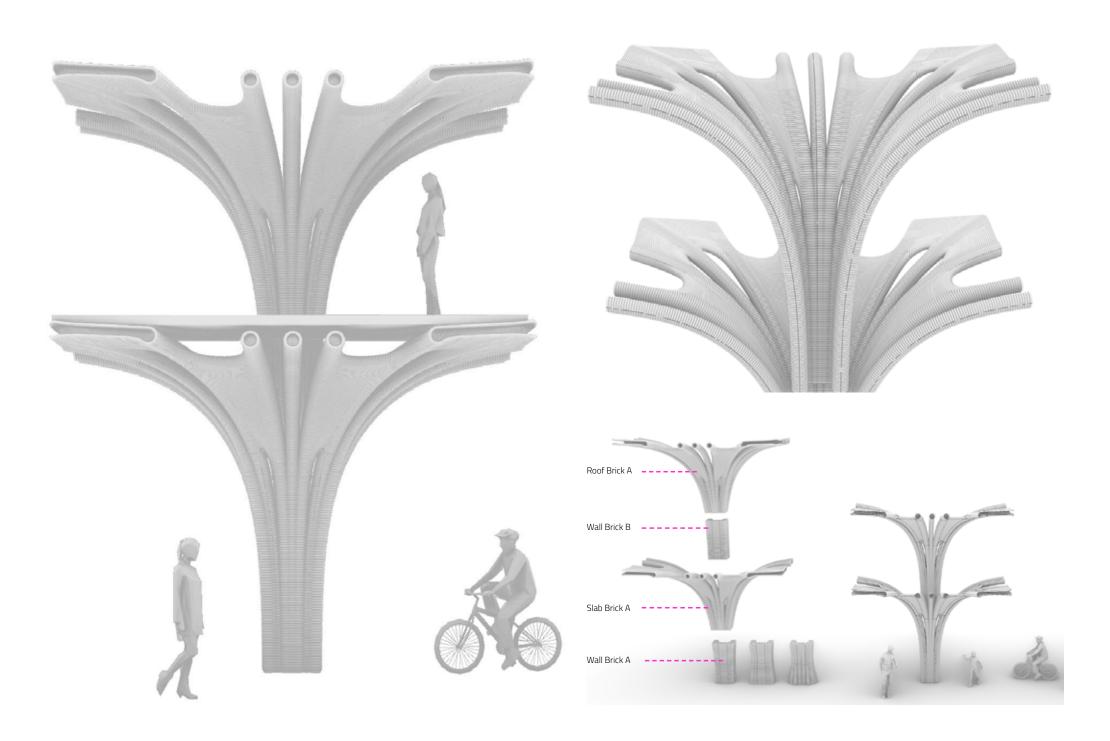
INDUSTRIALIS3D | NAHMAD - BHOOSHAN STUDIO // People-Matter

A vision for sustainable, personalized, pedestrian dominated, sustainable, car-free urban living ecology. We are aiming to rethink urban landscapes of 21st centuries to enhance the aspect of social interaction and social dynamics. Providing customised living solutions enabled with 3d printing while serving the diverse demands of citizens and enabling a democratic, techno-gaian urban living is our goal. While rethinking urban living, we also aim to rethink how we construct our cities. Thus we establish a holistic approach on how to construct a social life and its spaces.

Dilara Yurttas // Akash Clive Dr // Mauricio Villagra Dill'Erva

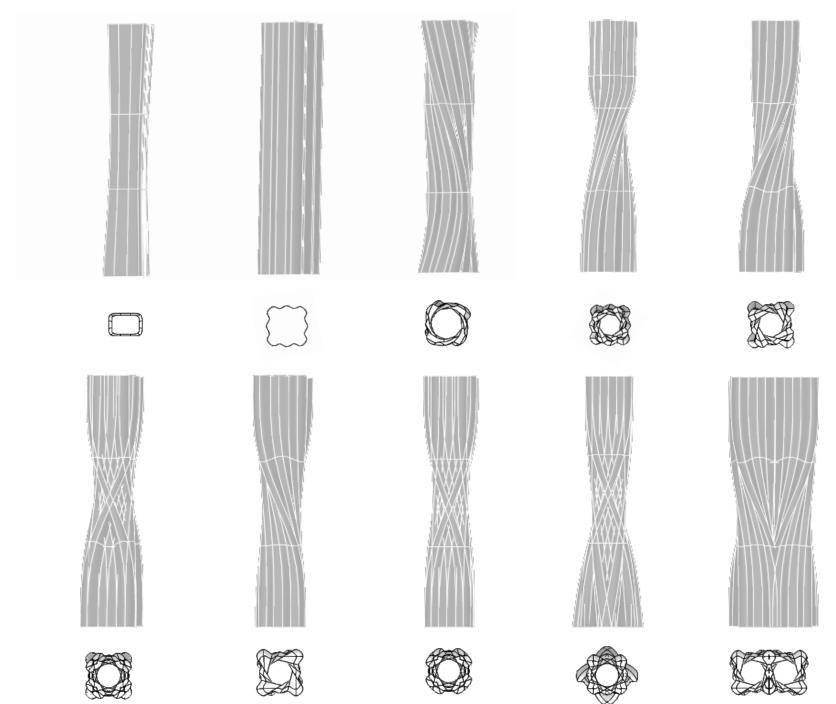




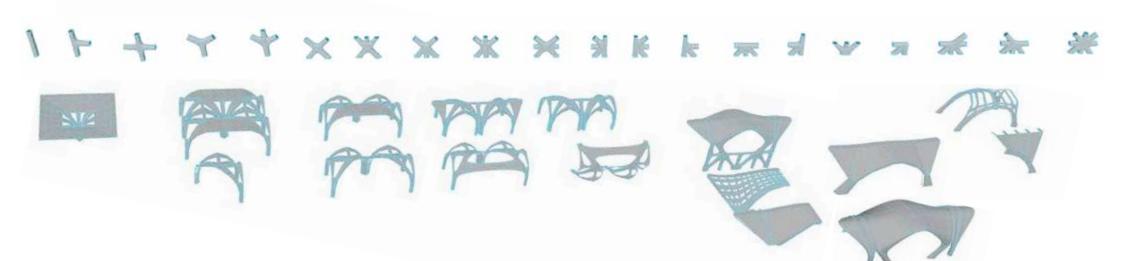


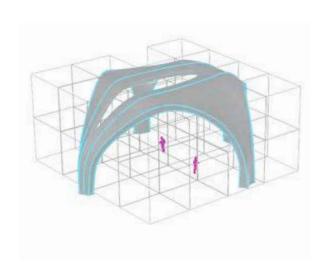
3D PRINTABLE TYPOLOGY STUDY

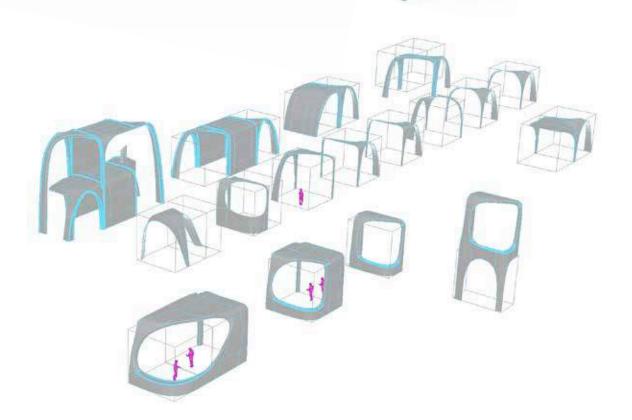
Columns with differentiated corrugations with spiral pipes allow us to connect to more directions for a hybrid urban design.



Printable nodes configuration shapes unreinforced 3D Printable structure forms to evolve.











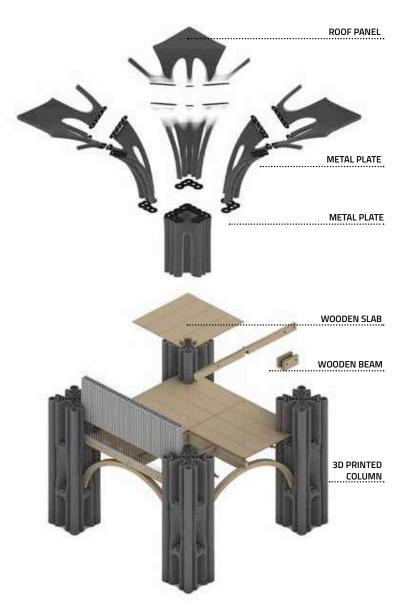












The metal plates are fixed to the printed parts by means reinforcements that goes into the printed layers.



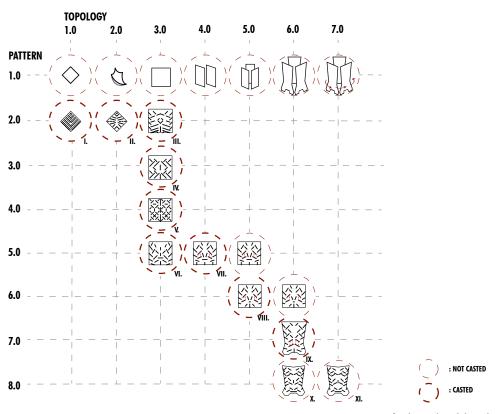
PLASTER WORKSHOP

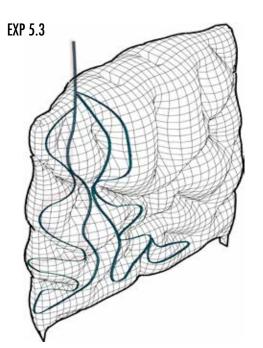
The workshop explores various surface typologies that can be achieved by manipulating the material with different patterns made on the template and differing the template in various ways. Through a series of physical and simulation models using plaster and fabric stitching, exploration of relationship between geometry and material behaviour has been made.

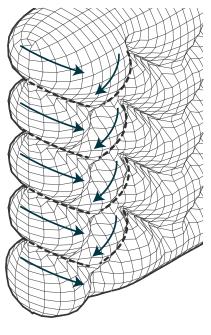
The research has been broken into parts differed by template number attached to each other, size and patterns. While building up the comlexity, we achieved natural bend and patterns in various sizesform 5 cm to 5cm models to up to 2 meter fabric models.

The models were simulated using rhino and maya simulations in order to predict the correlation between the stitching pattern and plaster behaviour. Having fabric and material parameters putten into consideration such as water flow, stitching gaps, sizes and more...

PROCESS TABLE









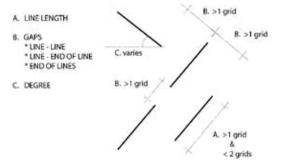
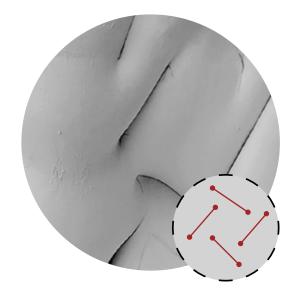
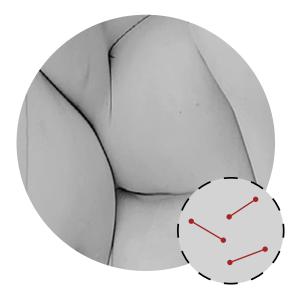
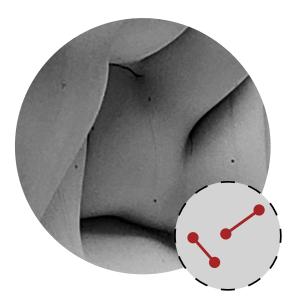


Diagram showing flow and movemet of the plaster with relation to the patterns created.

The rib create a unified and clear flow for the plaster, which allows the liquid to be controlled according to the width and depth of the angle.

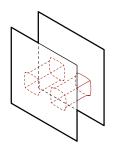


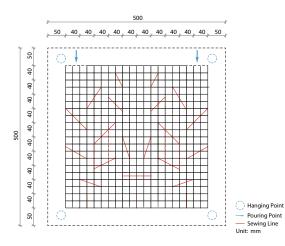




The detected pattern which looks like a T-shape, becomes an essential part of the deformation, which is a result of several t-shapes of different angles, which resemble a "Rib", and are used to control, deform and direct the plaster.

EXP 5.4

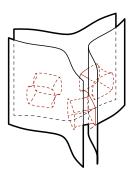


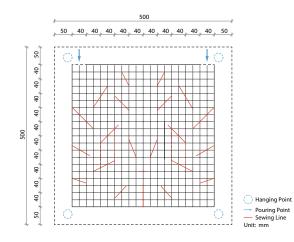


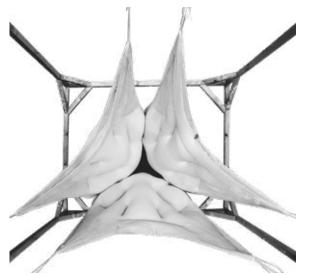




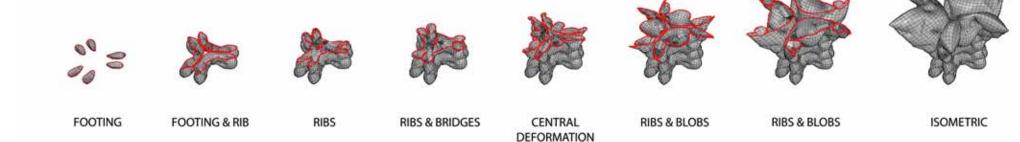
EXP 6.5



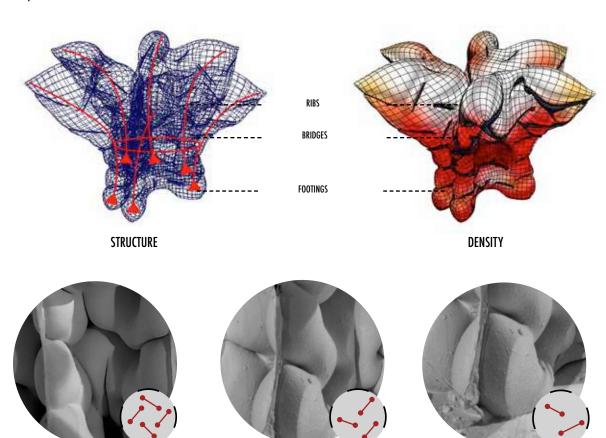




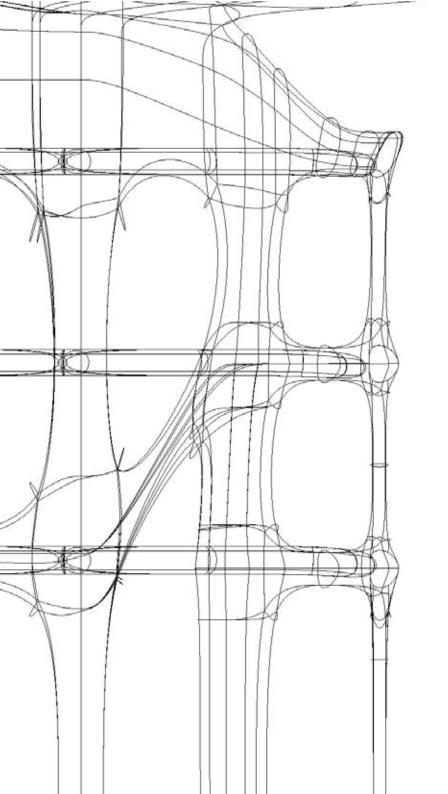




Final lycra shape is created using three bridges, which are hung on a frame, the sheets are curved to created footings and V-shapes openings. The final model was constarined also because of the scale of it which was up to 2 meters in height. This was challenging interms of controlling the material flow thus the patterning was much important and more dense in order to have things in control and have a good bending in shape.







2 // B.ARCH SELECTED WORKS

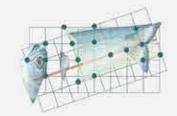
KARAKOY HANDCRAFTS AND ART MUSEUM

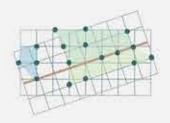
2017 - 2018 FALL

Karaköy is a happening harborside area, where funky cafes mix with neighborhood bakeries and family-run hardware shops. Ottoman-era buildings splashed with street art house the studios and boutiques of young fashion designers. Nearby in a former shipping warehouse The Istanbul Modern exhibits both contemporary Turkish and international art

The district tends to lose its unique industrial atmosphere. Handcrafts man in Karakoy are the most likely to dissapear from the history of the district for good..

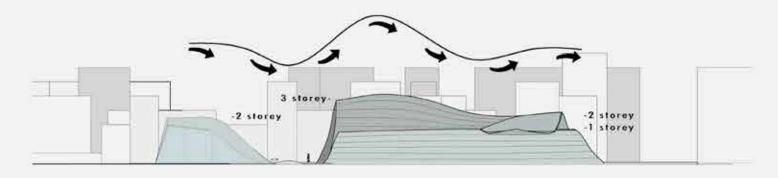


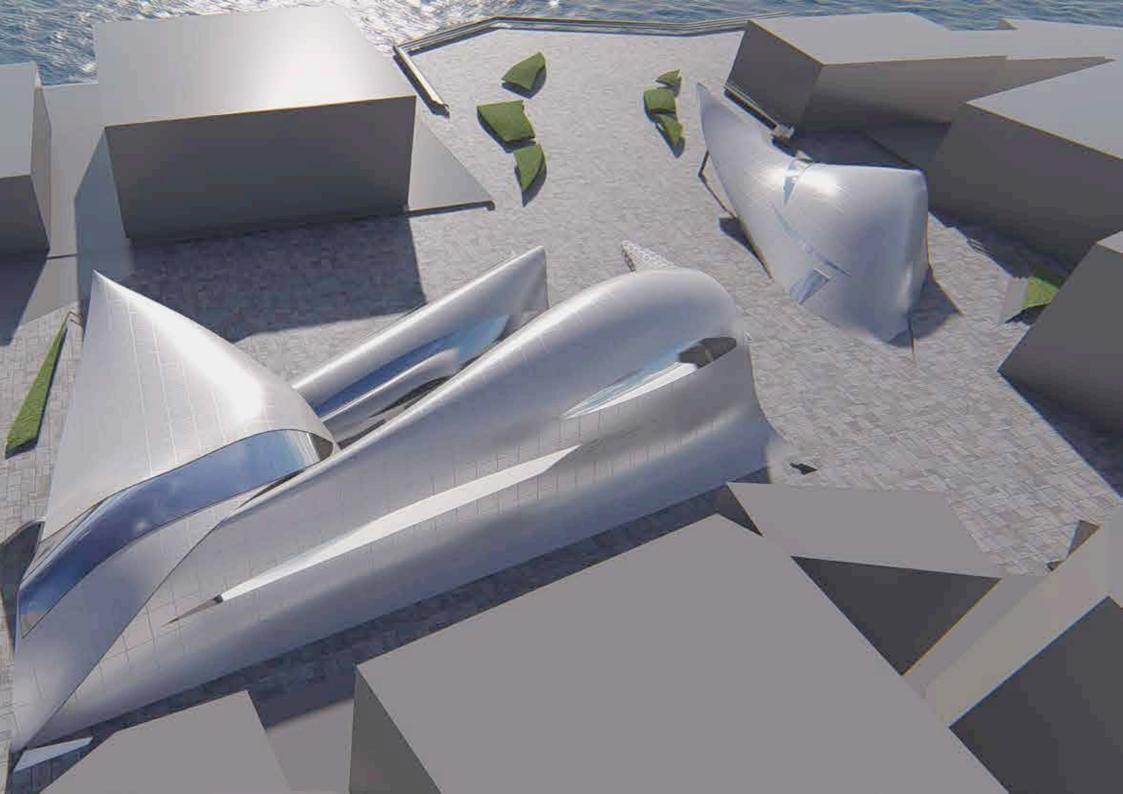






The museum is designed by the grid method which P.Eisenman used in Wexner Center to achieve efficient irregularity. Design process begun by indentifying the main pathway. Then had a grid identified by the boundary of the site and another astems on potential connections or "event sites" at urban, local scales.





INTERIOR

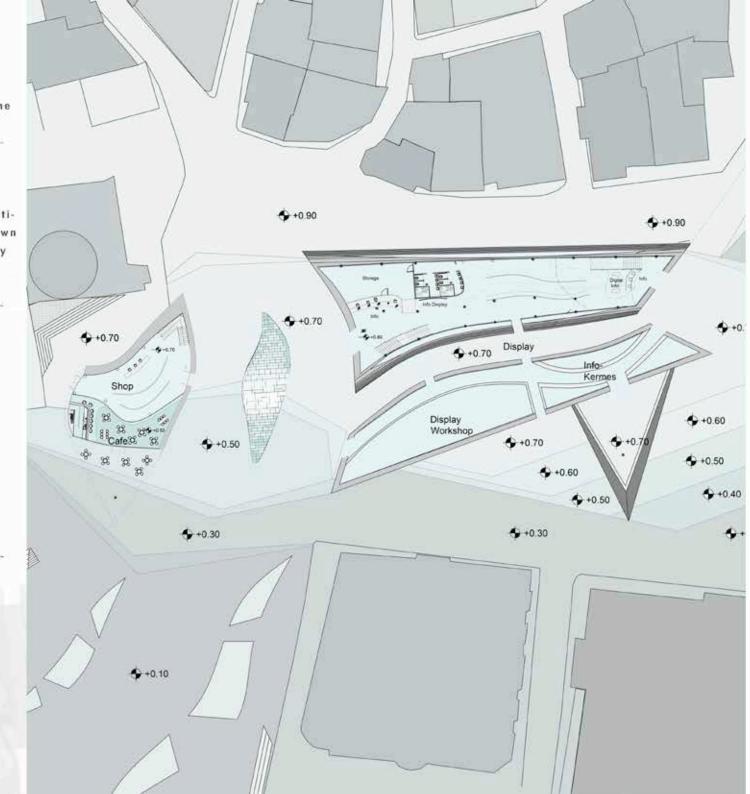
The design includes variety of facilities in it. In the main structure which contains exhibition halls, the corridors of galleries are divided with flooring patterns. Every concept of exhibiton is divided and being shown on every each of the enterances.

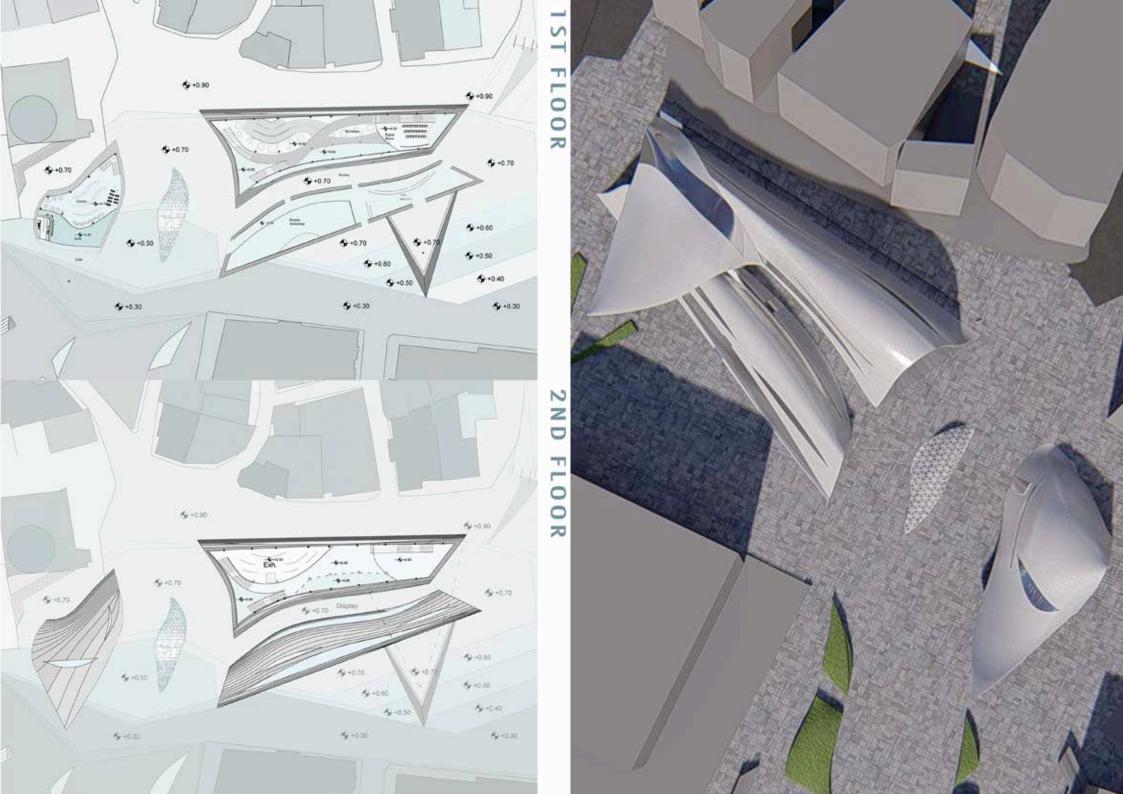
The one storey structure serves as workshop exhibition and bazaar of the products being made and shown with see through facade to outside and the pathway between Museum building and Atelier Tunnel.

The additional building includes a library with seaview, a cafe and a museum shop.

STRUCTURAL SYSTEM

Three structures are serving at the facility. The amorf shells of the structures carries themselves with trusses on the main museum building and concrete shells on the others supported with columns.





SYSTEM DETAIL

Ceramic granite ventilated facade system can help to enhance a building's BREEAM rating, with its classification of A+.

Many ceramic granite facade panels have L.E.E.D. (Leadership in Environmental and Energy Dosign) credits.

Ceramic granite facade panels do not release radon or any other radioactive gases and are completely inert.

Insulation

Hidden Clips Fitted Facade System
The most suitable insulation method



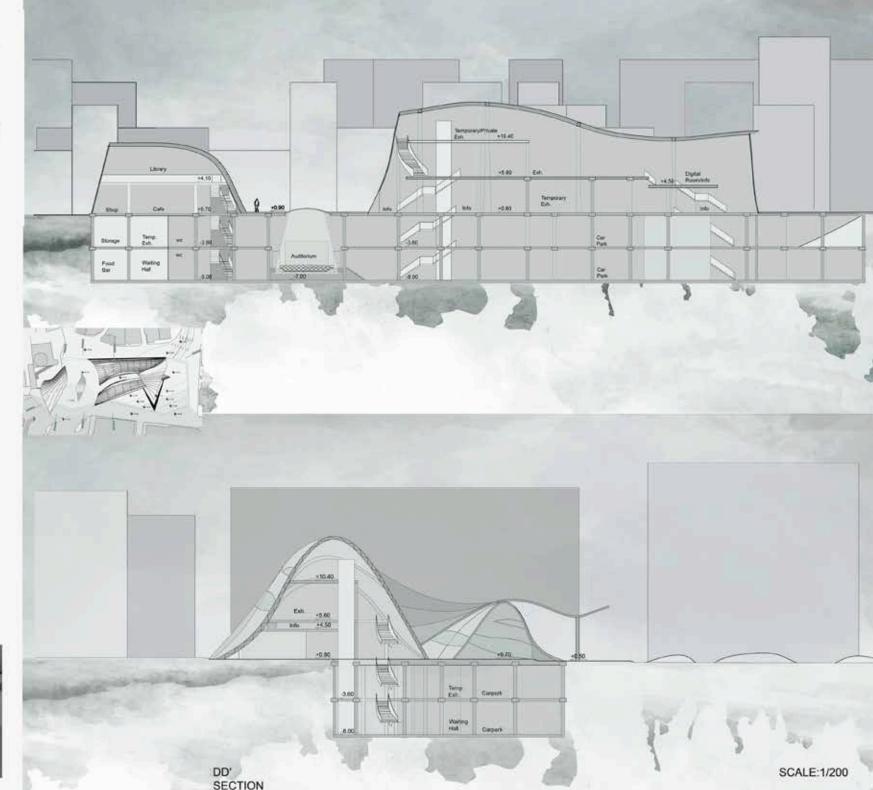
HIDDEN CLIP

- 1-Anchorage
- 2- Bracket
- 3-Insulation
- 4- "T" profile
- 5-Fixing clip
- 6- Porcelain tile

Load Bearing System

Three structures are saving at the facility. The amorf shells of the structures carries themselves with trusses on the main museum bullding and concrete shells on the others supported with columns.





PARAMETRIC WALKING PATH INSTALLATION STUDY

A spine inspired pavillion using contoured shaped metal panels covering the walking path connecting Ozyegin University Campus to the Dormitories.

A spiral fractalization for a dynamic effect in between two facilities bonding point while blocking the hard wind.



















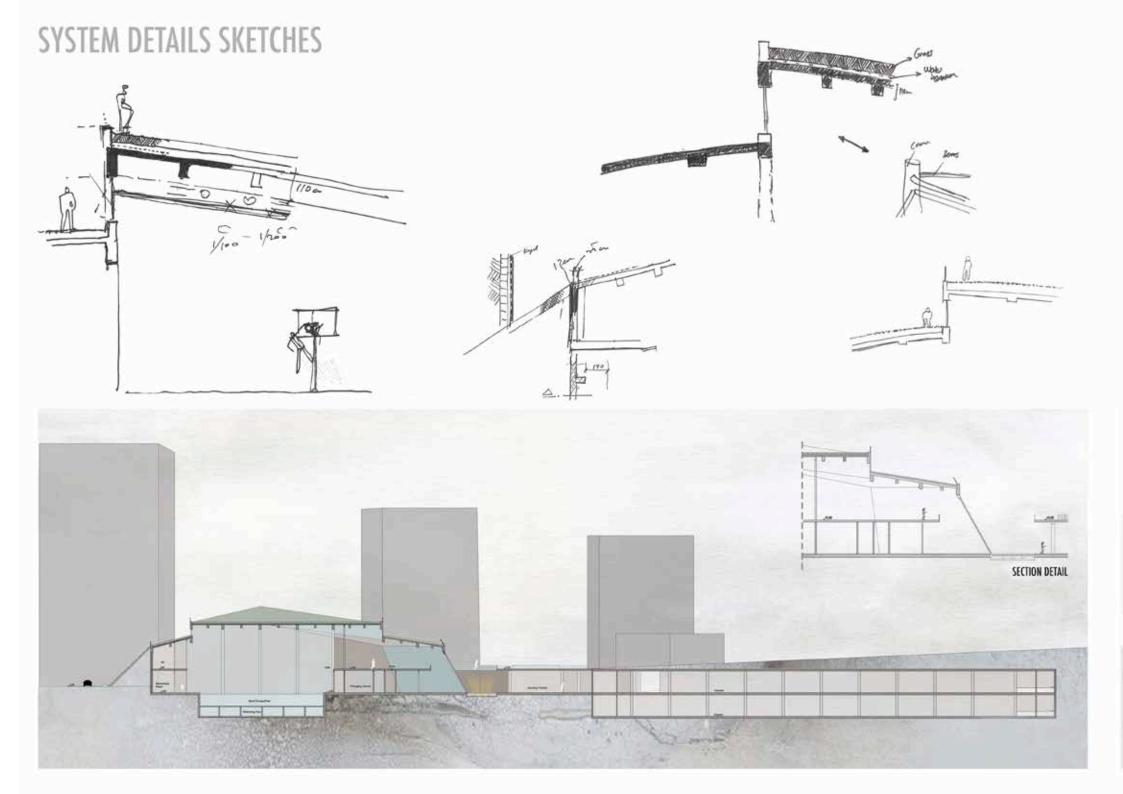




Trigger the desire to walk on the roof which is maintained with the help of natural level differences and resemblances.













0.00 LEVEL PLAN

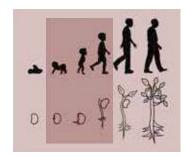
-5.00 LEVEL PLAN



THE SEED CHILDREN MUSEUM

DEFINITION:

- the initial state, position of a changing, growing or developing process; the ultimate precursor in a defined chain of precursors.
- is a **complex structure** that consist of the embryo and **provides protection and nutrients for the development** of it both in nature and humans.
- the unit of reproduction.

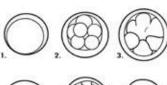


PLACE OF DEVELOPMENT

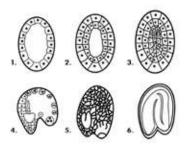
HOW IS IT IN NATURE?
ROOTS OF DEVELOPMENT

SEED OF NATURE (ENDOSPERM)

SEED OF HUMANITY (EMBRYO)

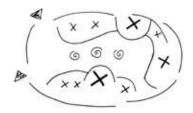






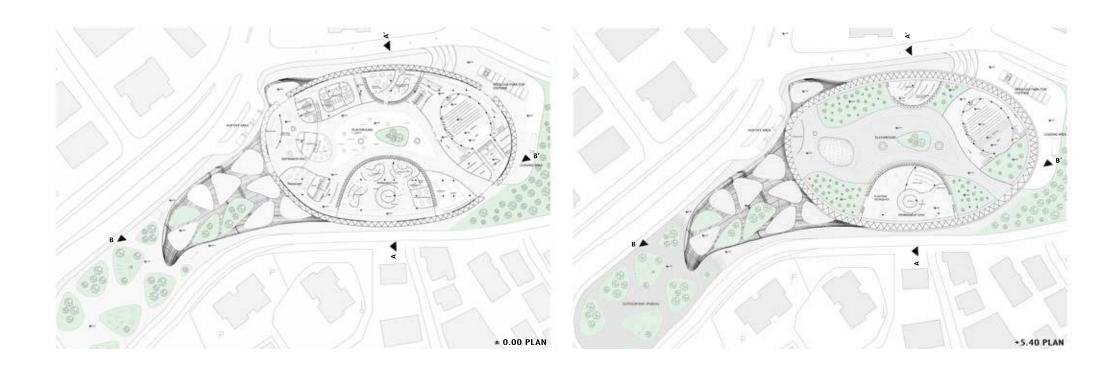
Evolution is a result of process. Process is parallel to childhood. We are investing into the process. Main design desicions are based on the structural evolution process above. The structure is nevertheless combined to planning structure as well as the general design.

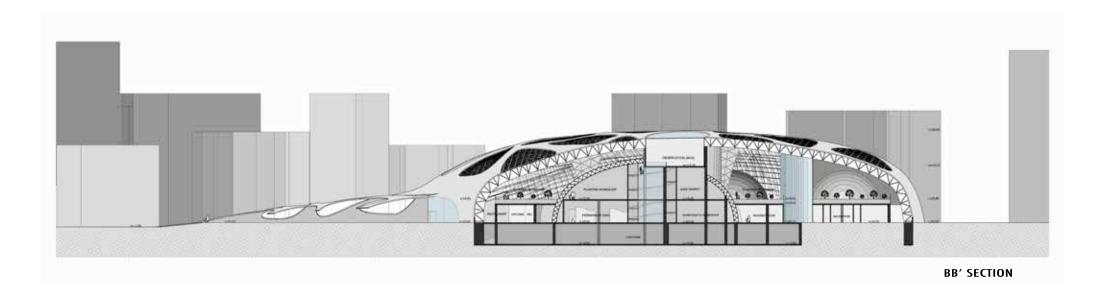


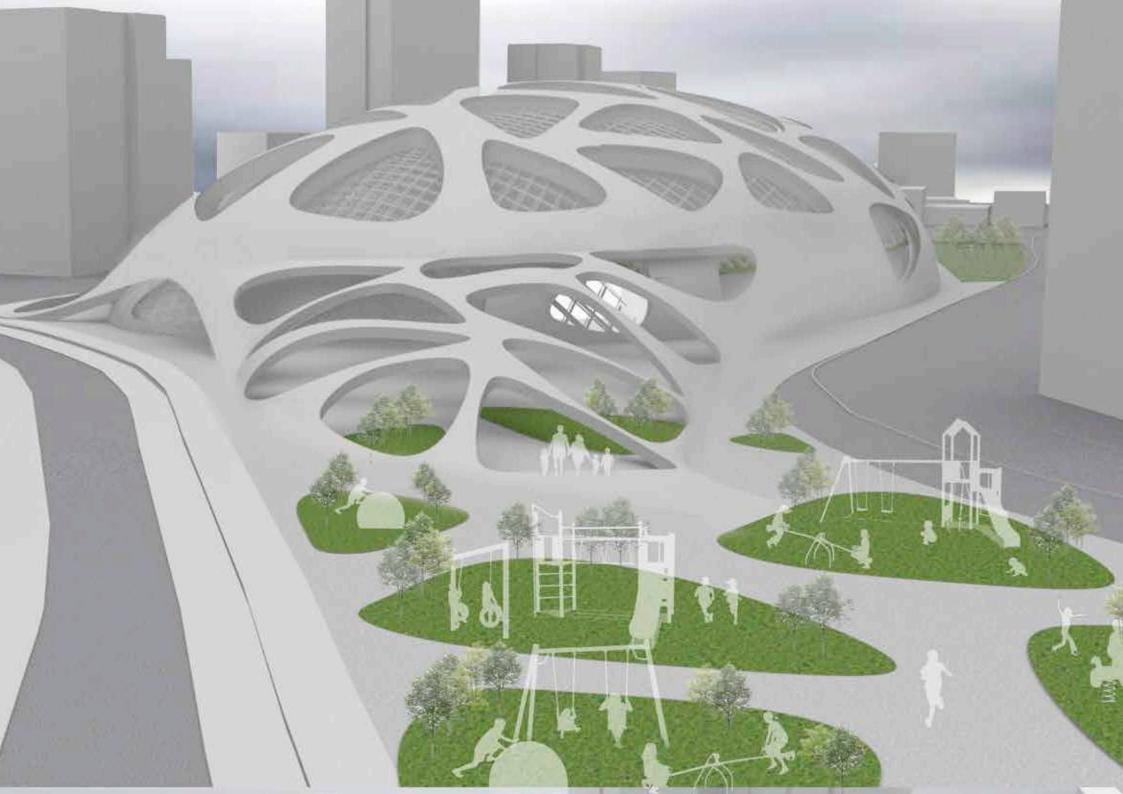


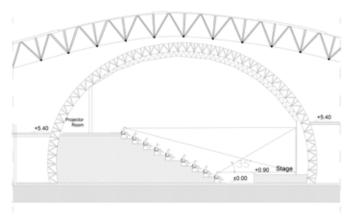
- SETBACKS FROM THE MAIN/SECONDARY STREETS
 GRABBING ATTENTION WITH A URBAN PUBLIC PARK TO THE SITE
 SETTING MAIN ENTRANCE POINT ACCORDING TO ATTRACTION VALUE
- :EDUCATIONAL/SERVICE AREAS



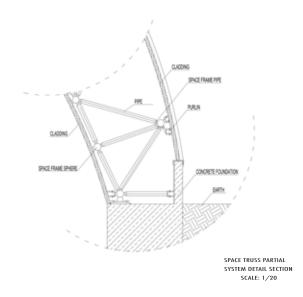


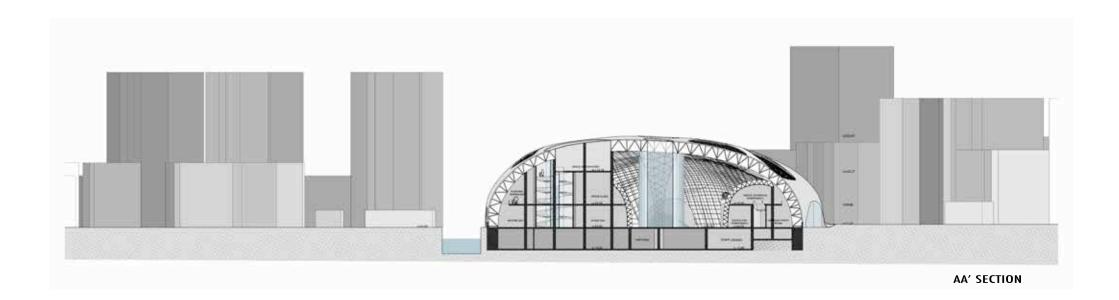


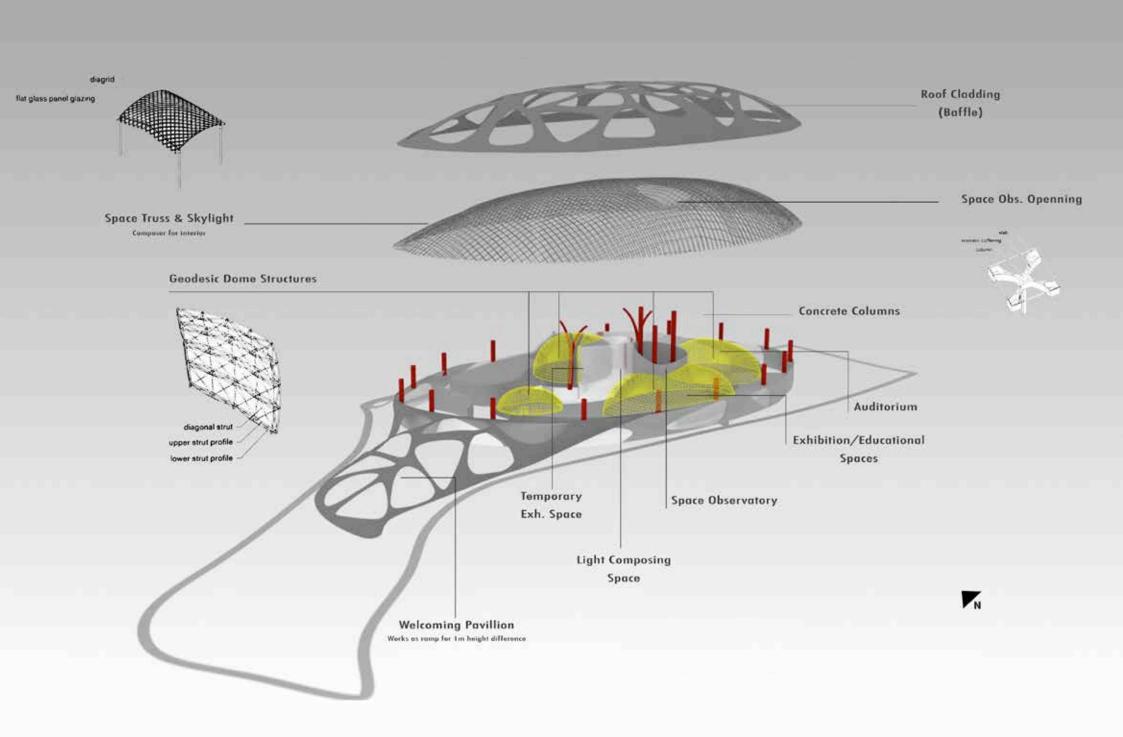




AUDITORIUM SECTION
SCALE: 1/100

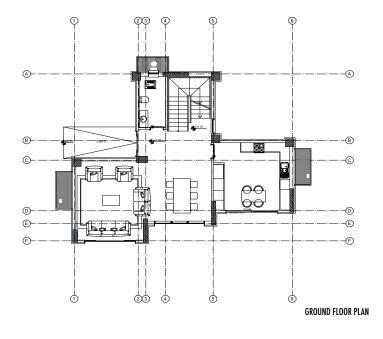


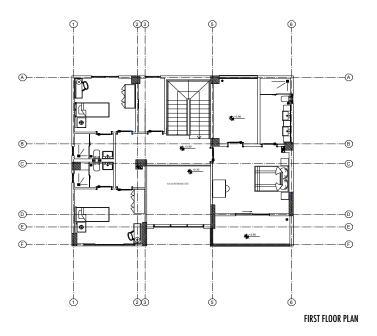


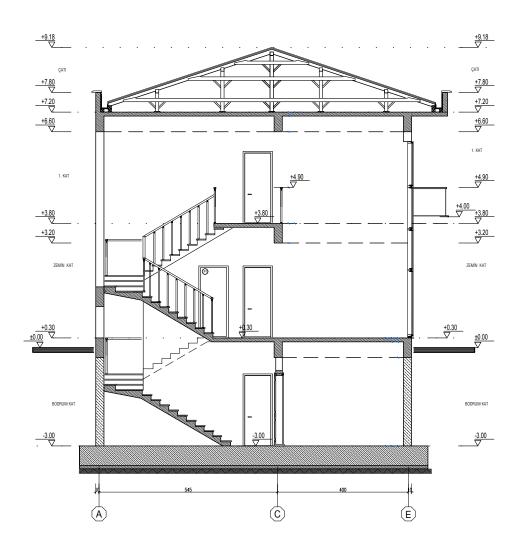




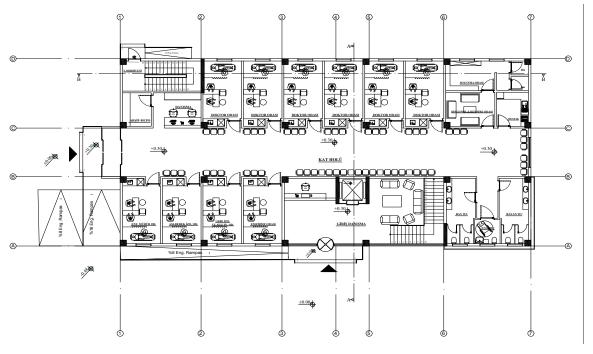




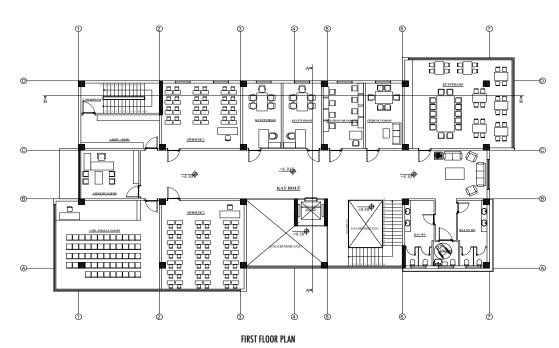






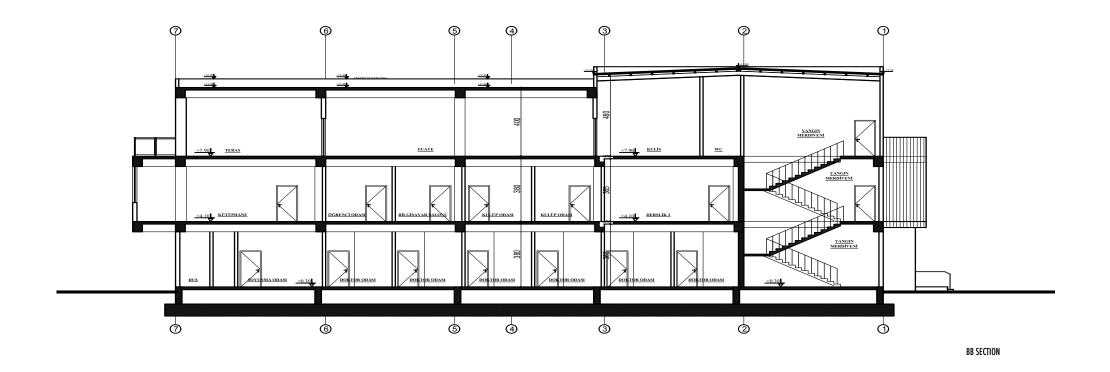


GROUND FLOOR PLAN



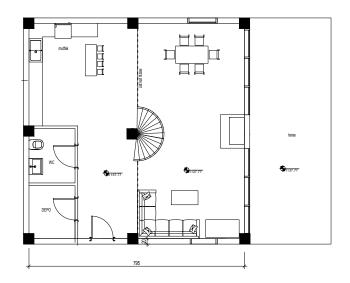
UNDER CONSTRUCTION



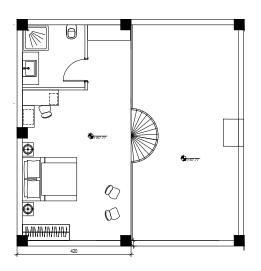


SILE TOWNHOUSE // ISTANBUL // 2019 // FREE-LANCE

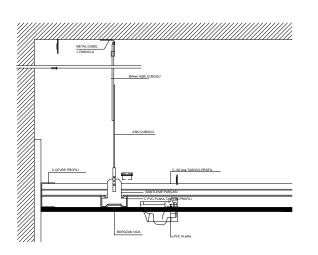




GROUND FLOOR











WOOD WORK MODELS (FOR CARPENTER)

FIRST FLOOR FIRST FLOOR ASSEMBLY DETAIL



