RAF CONSULTING ENGINEERS

A new life style is the fruite of new ideas

The human beings create the environment
& the environment creats the human beings

RAF CONSULTING ENGINEERS

Raf consultant engineering Co. has commenced its professional activities since 2017 with Mr. Annabestani as CEO. While possessing an independent design atelier, Raf Co. has its own separate specialist and experienced architecture, civil, electrical & mechanical engineering departments.
Raf Co. has accomplished its noteworthy services in a plenty amount of residential, administrative, commercial projects with both private or governmental project owners and has thoroughly achieved the clients satisfaction.

Mohammad
Anabestani

Architecture

Residential Project

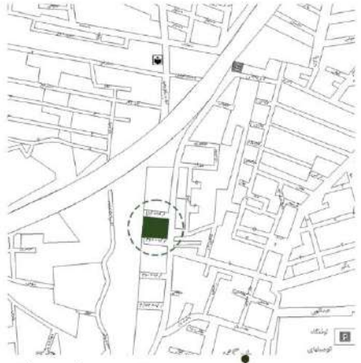
Client : Mr. Eskandari

Location : Tehran-District 2

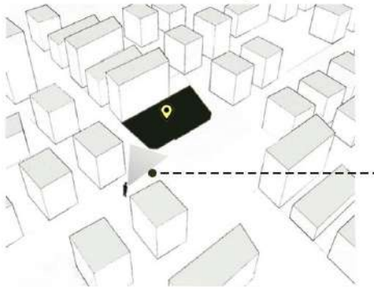
Total Area : 3182/69 m^2

Material : Stone-Brick-Metal

طراحی این پروژه به دلیل قرارگیری در مجاورت سه گذر و بافت شهری تقریبا قدیمی و اینکه می تواند مبنا و الگویی برای نمای ملک های مجاور باشد ، از اهمیت ویژه ای برخوردار است.



نقشه هوایی منطقه



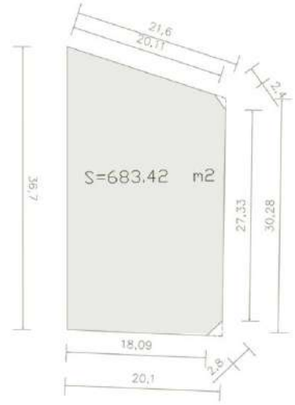
دید از گذر

East Elevation

South Elevation

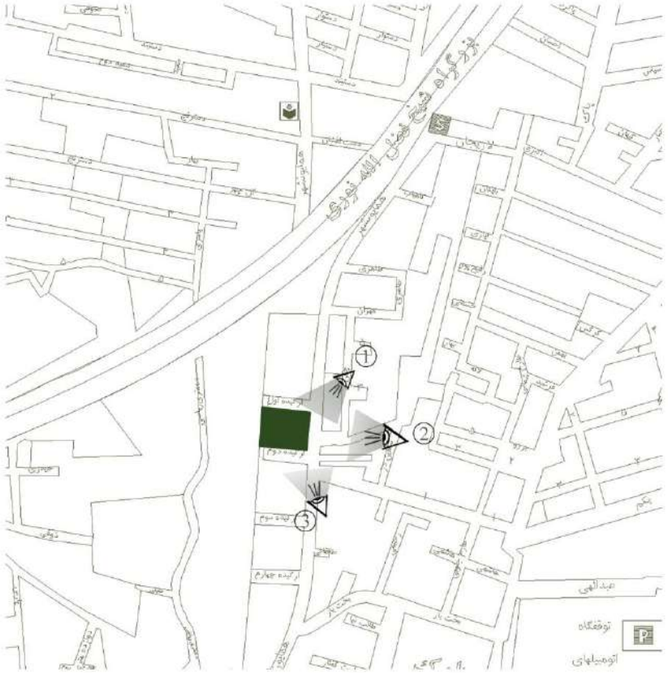
Plans

پلان طبقات این پروژه در ۲ تیپ و برای واحد های ۸۰-۹۵-۱۱۰و ۱۳۰ متر مربع طراحی شدند تفاوت طراحی پلان ها برگرفته از جابجایی بالکن ها در طبقات است هماهنگی این دو (نما و پلان)منجر به شکل گیری این طراحی منحصر به فرد برای این پروژه شده است.



پلان طبقات 1-3-5

پلان طبقات 2-4



Views

Location:Tehran-District 2

view 3

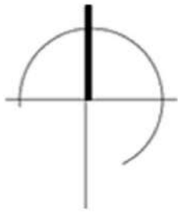
view 2

view 1

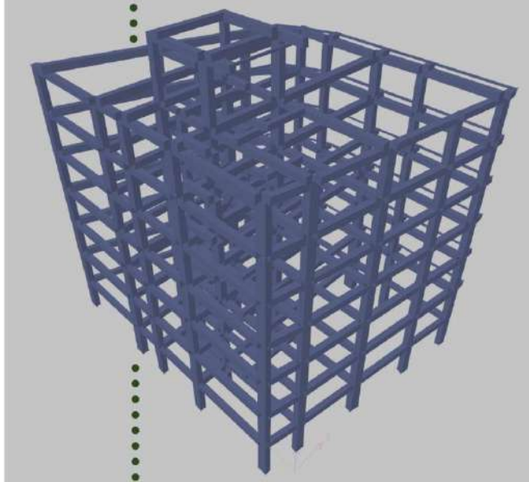
Architectural Plan

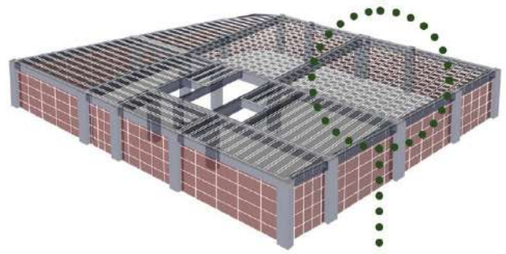
Type 1

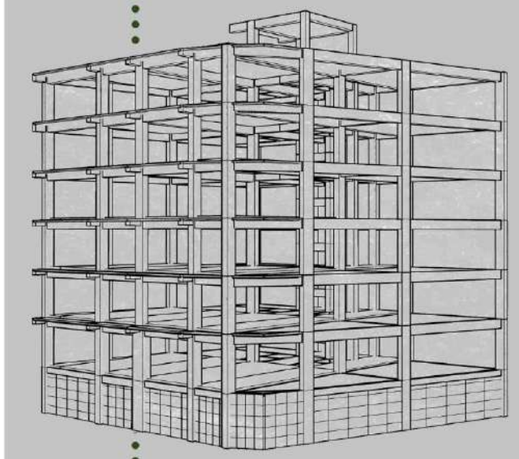
Total Area: 1395/07 m²



Structure





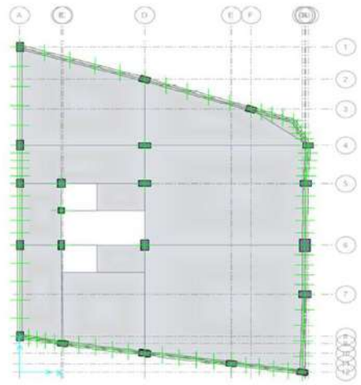


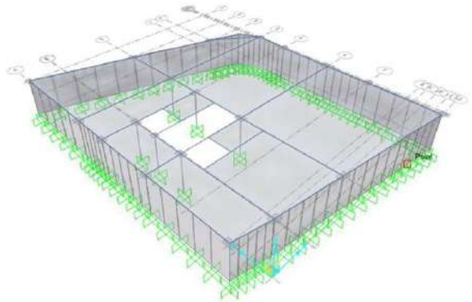
Waffle Roof

One & Two-sided

مزایای استفاده از سقف وافل ترکیبی (وافل یک طرفه + وافل دو طرفه)

- بهبود عملکرد لرزه ای به دلیل **کاهش وزن** سازه و نیروی زلزله
- **کمک به پلان معماری** و طراحی فضاهای **منعطف**
- طراحی **دهانه های بزرگتر** با استفاده از **وافل دوطرفه** و **کاهش تعداد ستون ها** برای **تامین پارکینگ** های مورد نیاز و حتی مازاد
- استفاده از **وافل یک طرفه** در دهانه های کوچکتر و **کاهش هزینه** های سازه ای
- ایجاد طرح جذاب در سقف پارکینگ و **عدم نیاز به سقف کاذب**
- امکان جانمایی نامنظم ستون ها و تعبیه **بازشوهای بزرگ**
- کاهش هزینه اجرا تاسیسات به جهت **کاهش آویز تیرها**





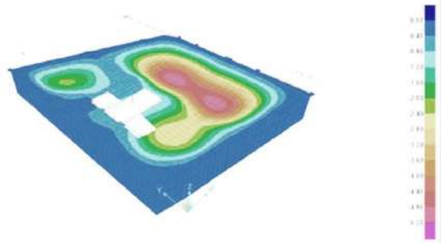
تناژ میلگرد ۲۹/۸۰ در هر متر مربع (تیر و ستون)

(**کاهش تناژ میلگرد** با در نظر گرفتن ملاحظات سازه ای)

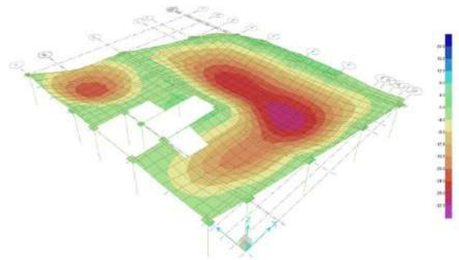
Structure

Concrete Structure &

Waffle Roof

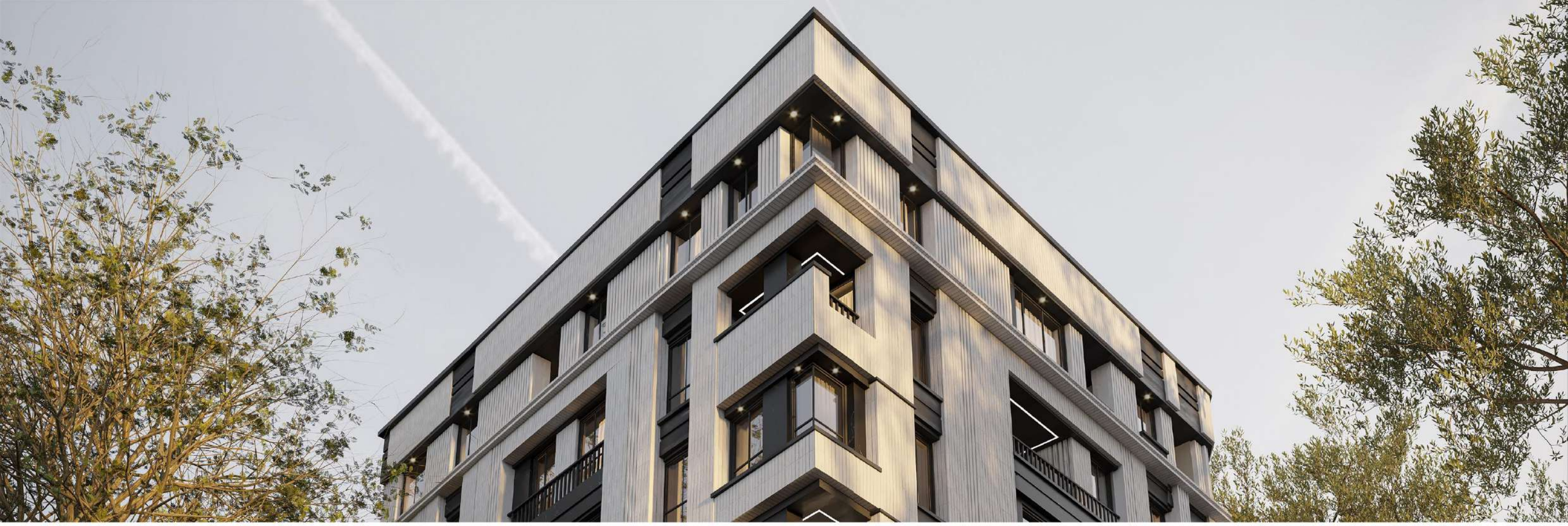


کنترل لرزش در سقف



کنترل تغییر شکل دراز مدت سقف

Electeric



در سیستم وایرلس می توان مشخصه های مختلفی از جمله شدت روشنایی و رنگ نور چراغ هارا به صورت دستی و گروهی از طریق نرم افزار نصب شده بر روی گوشی تغییر داد

In the wireless system, various characteristics such as the illuminance level and the color of the lights can be changed manually and in groups through the software installed on the phone.

WIRELESS

Grouping

کنترل روشنایی گروهی محصولات با نرم افزار

CCT Charge

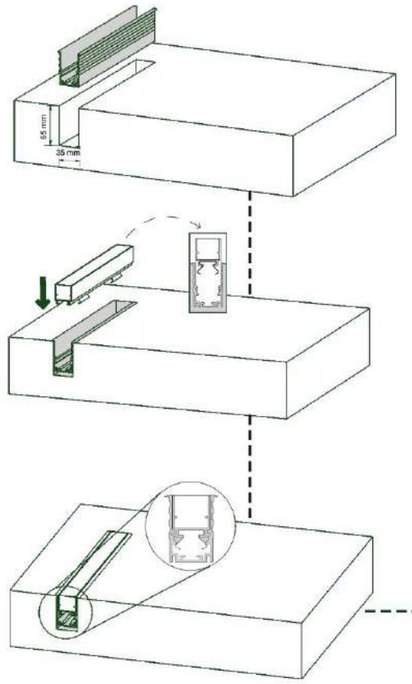
تغییر دما رنگ ۲۷۰۰-۶۵۰۰ کلوین

Scalability

مقیاس پذیری برای استفاده در تمامی محیط ها

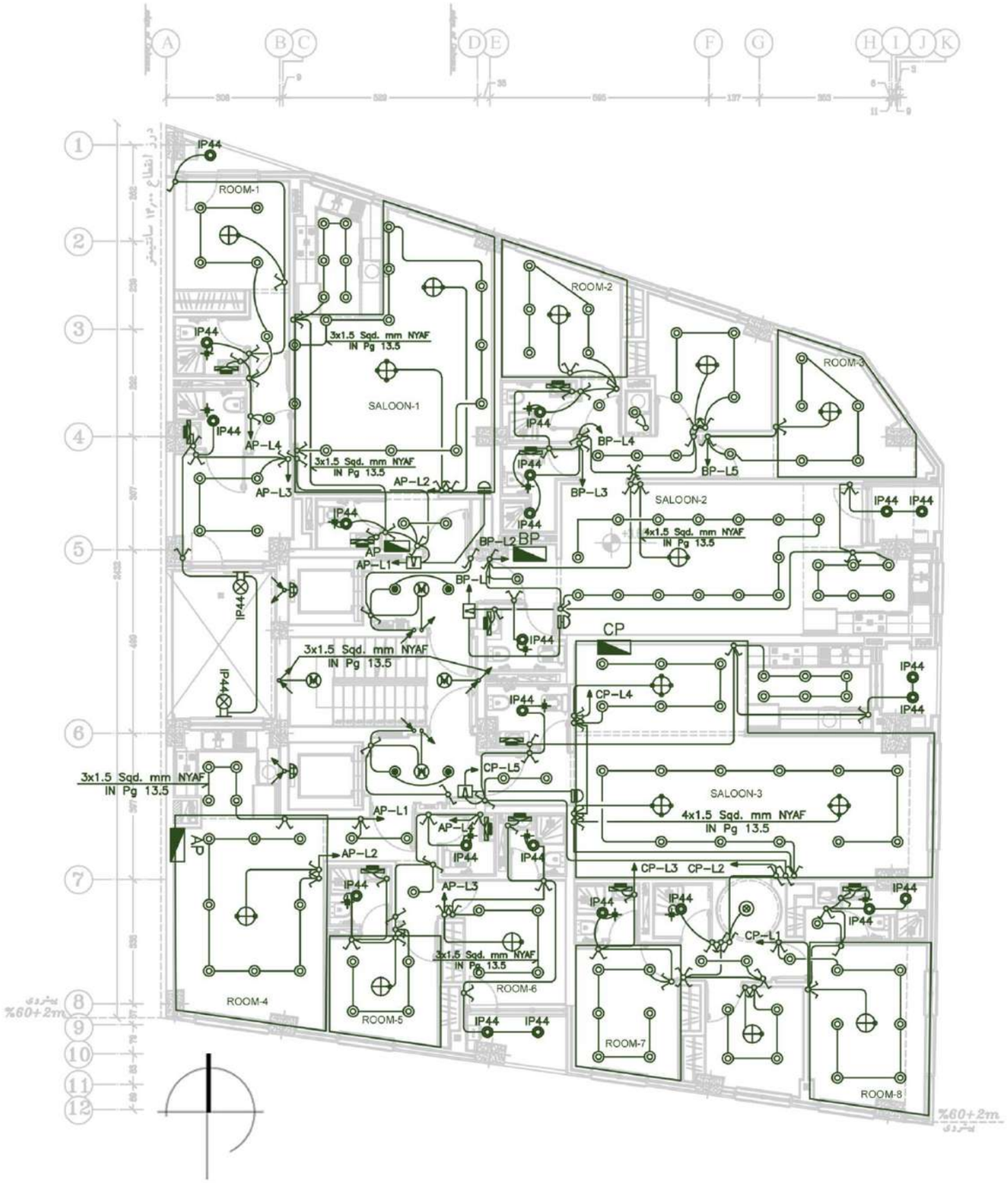
Cloud Control

کنترل از راه دور سیستم روشنایی از طریق اینترنت

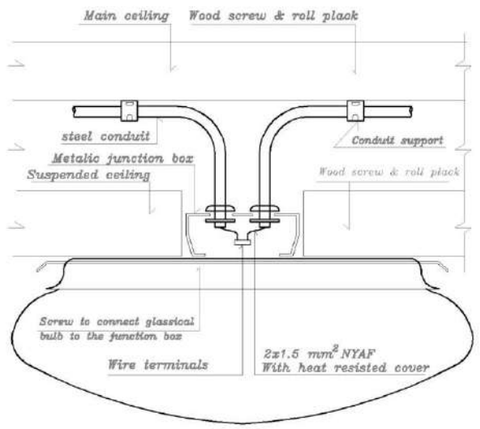


استفاده از نورهای خطی وایرلس برای روشنایی بالکن ها

Using wireless linear lights to illuminate balconies



Lighting System

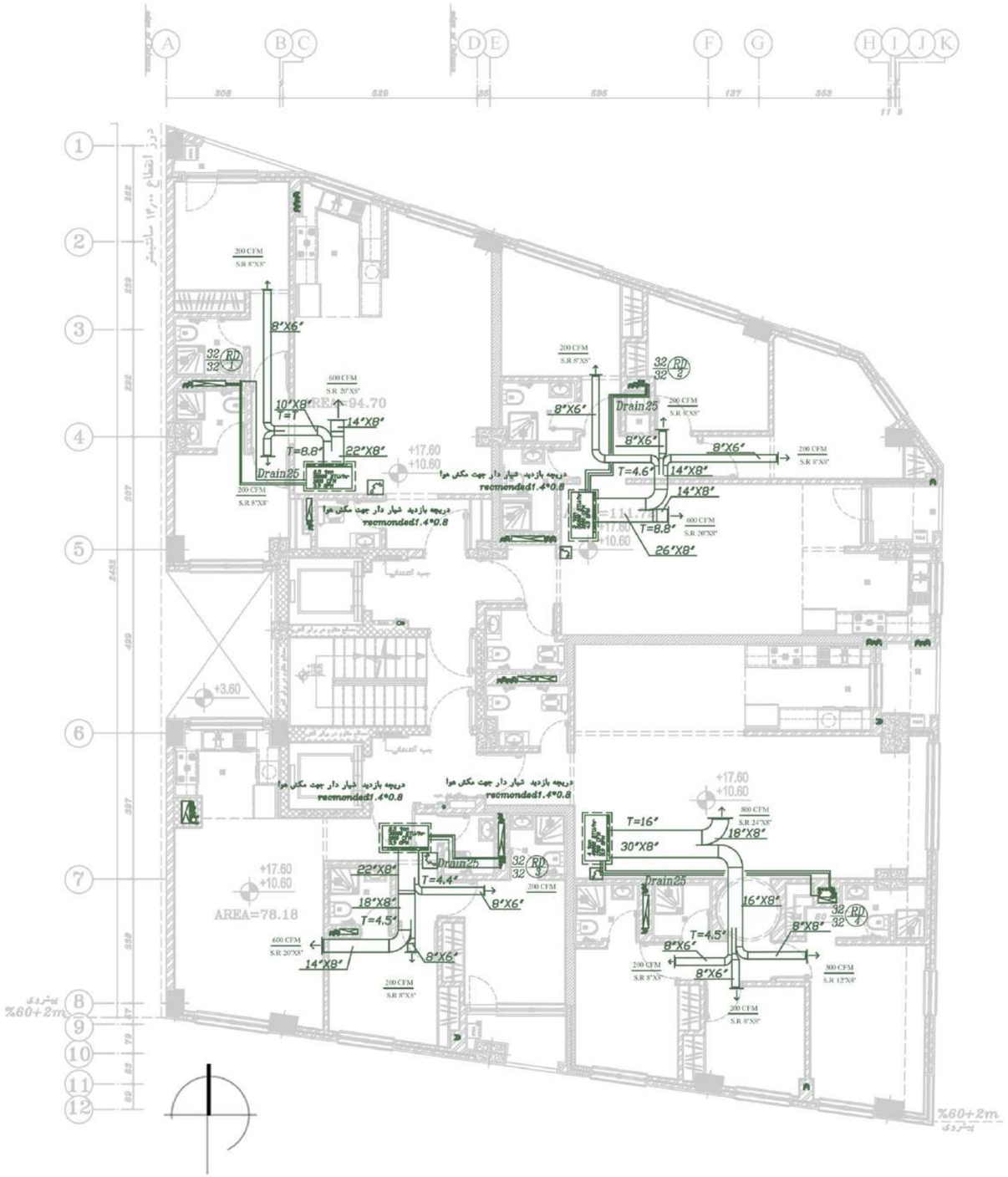


Surface mounted luminare for suspended ceiling

Type1

Lighting fixtures are selected according to any location definition and condition while lighting calculation and design is done regarding the national codes and interior architectural design.

Mechanic



سیستم تهویه مطبوع

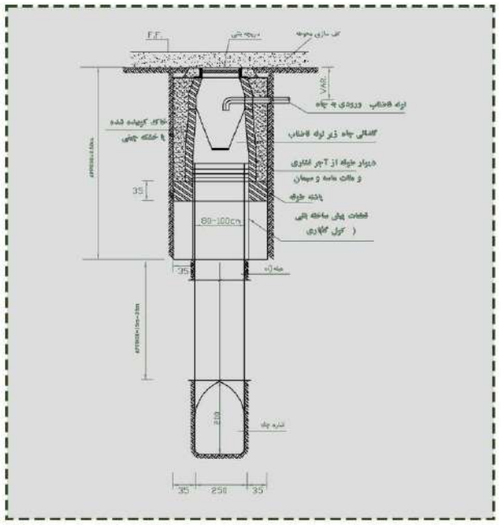
- کانال کشی داکت اسپیلت با استفاده از ورق گالوانیزه
- در نظرگرفتن سرعت و افت فشار هوای استاندارد
- استفاده از لوله کشی مسی برای اتصال اسپیلت به کندانسور ها در بام
- استفاده از کویل آب گرم برای تامین هوای گرم و کاهش مصرف برق

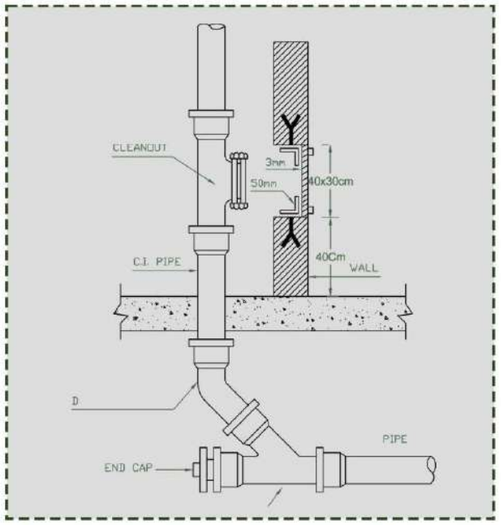
Mechanical Plan

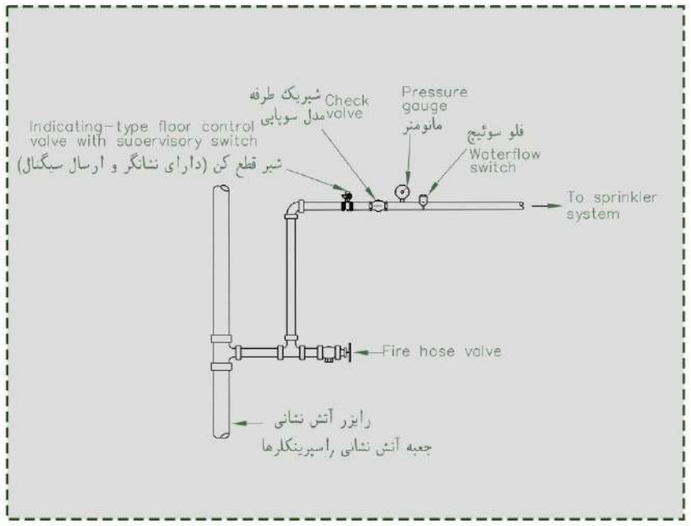
Type1

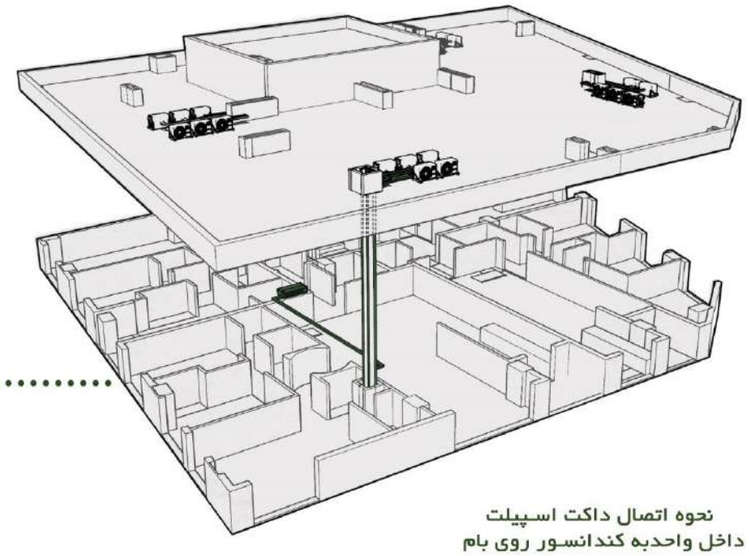
Details

Mechanical Plan

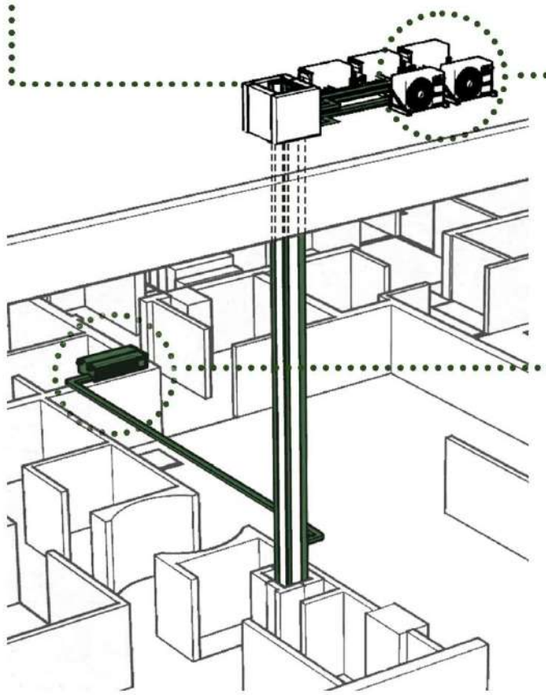








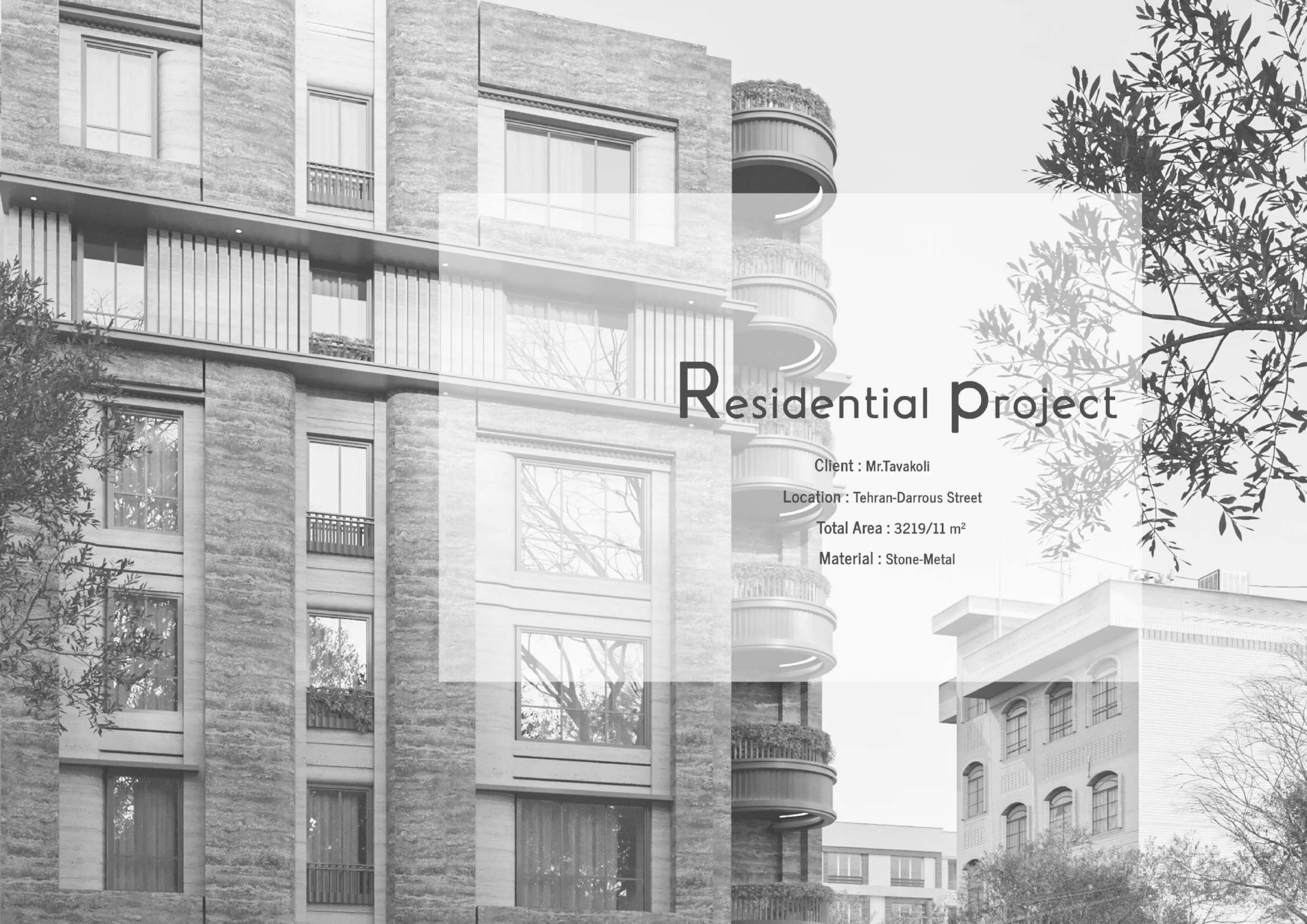
نحوه اتصال داکت اسپیلت
داخل واحدبه کندانسور روی بام



Condenser

Duct Split

Architecture



Residential Project

Client : Mr.Tavakoli

Location : Tehran-Darrous Street

Total Area : 3219/11 m^2

Material : Stone-Metal

Using curved balcony in the architectural plan had a great impact on the design.

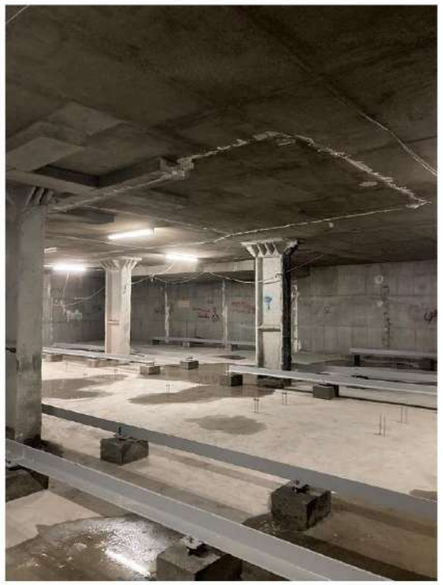
Design Challenge

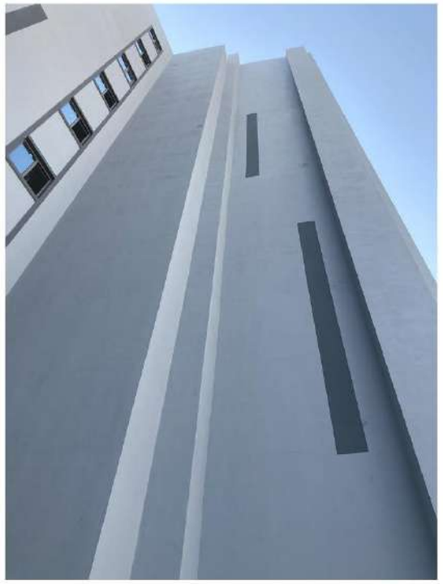
This project is located in Darrous region and the special location of the project has caused a challenge in design.

Supervision & Construction

Location:District 1 - Shariati

کارفرما : آقای ملکوتی خواه
وضعیت : اتمام
تاریخ شروع : ۱۳۹۷





Structure

Steel structure is a category of steel used for making construction materials in a variety of shapes.

Architecture

Sarvelat
Villa Project

The project is located in Gilan Province.It has an area of ten thousands square meters which is created by combining three discrete parts.

The land is located in an inclined section of the area which causes a 43-meter level difference between two points of the site.
The main challenge in designing the outdoor area in using the natural slopes in the best way.

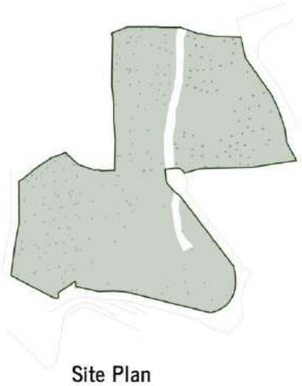
Client : Mr.Asadi

Location : Gilan-Sarvelat

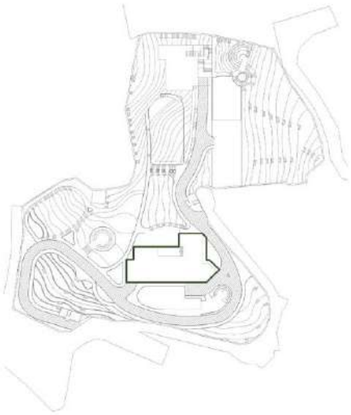
Total Area : 10000 m²

The client requirements include:

- A private villa
- A main villa
- Stable
- Tennis court



Site Plan

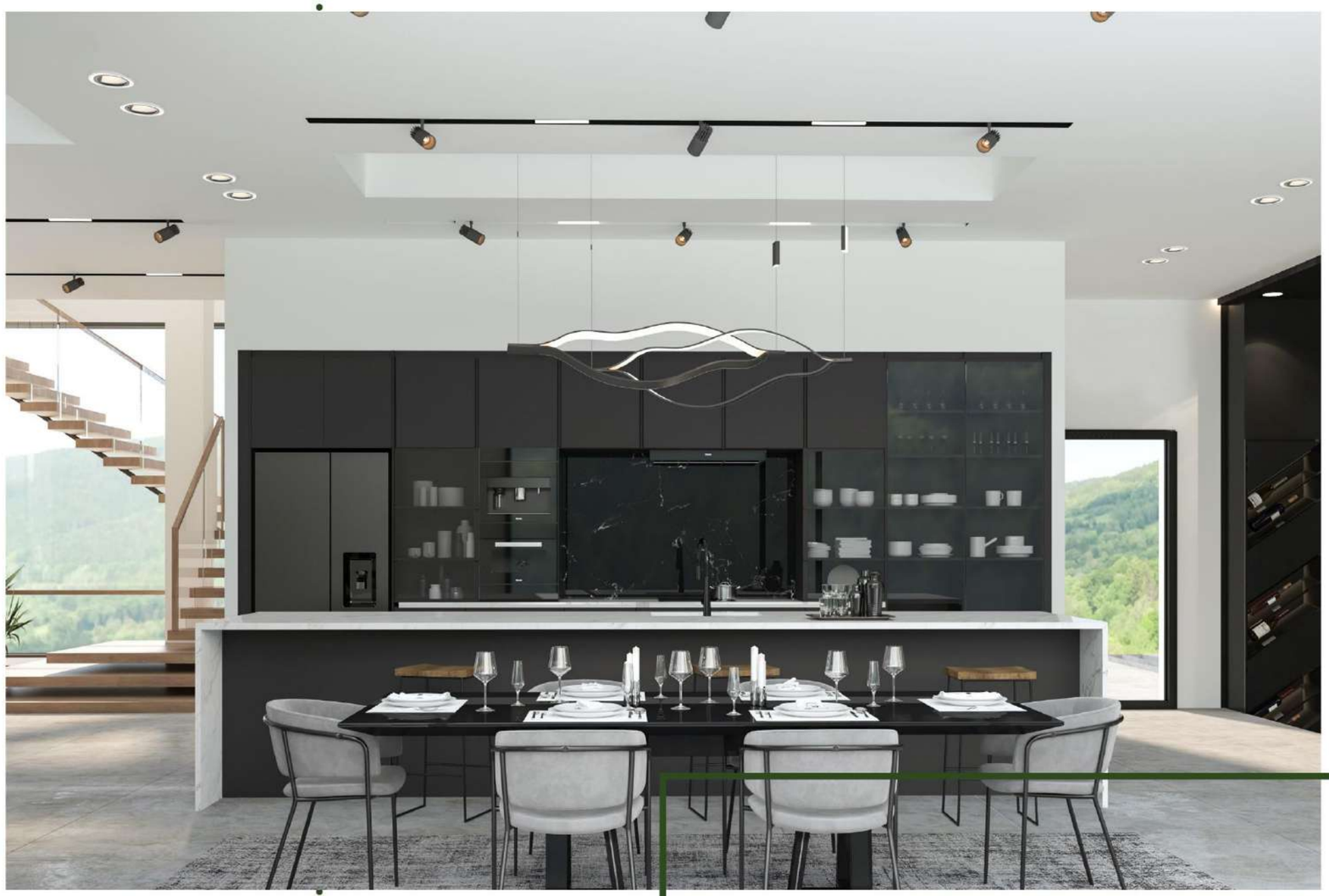


Location Of The Main Villa

First Floor Plan

Living room and bar design

Stair case

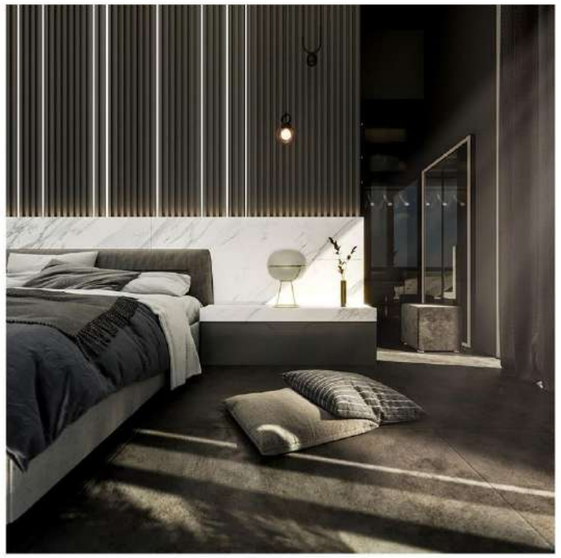


Kitchen

Interior design of the kitchen & dining room on the first floor and using neutral colors.

Office Room

An office room is located on the second floor and at the end of the hallway of the bedrooms and has a separate access from outside .



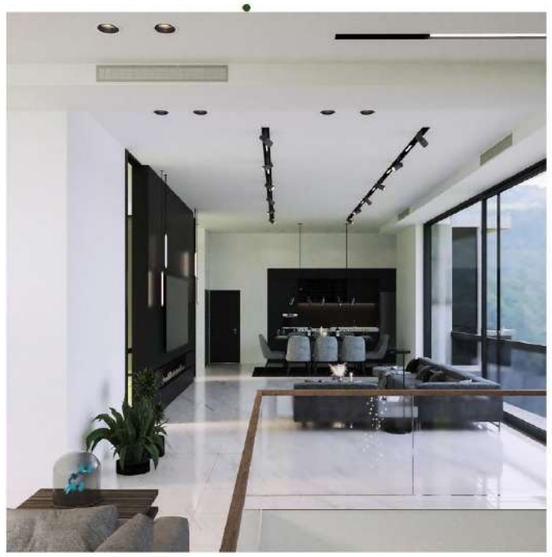
Bedroom

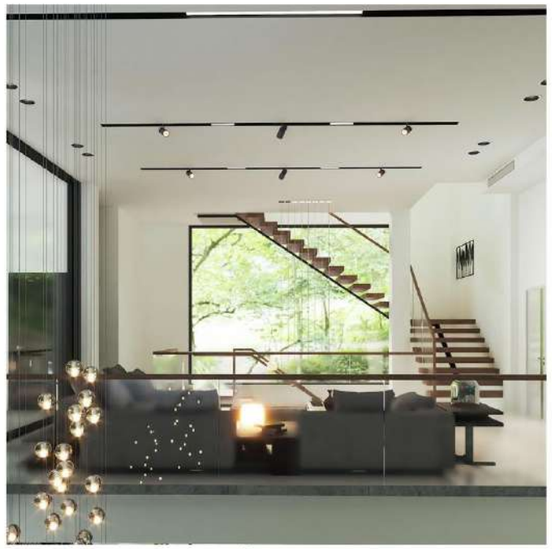
There are three master bedrooms on the second floor , which have a different design based on the client's request.

W.c

Pool & Terrace

A pool is placed on the terrace in second floor and living room has a panoramic view to this area.



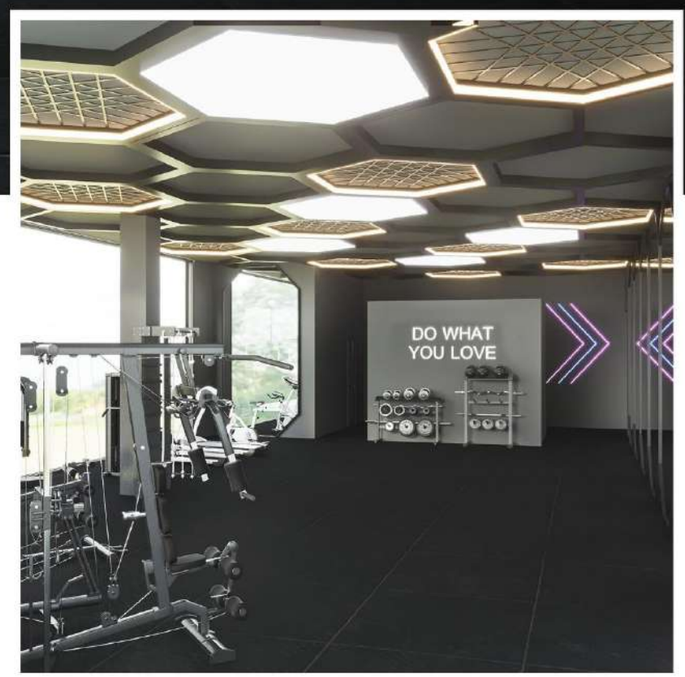


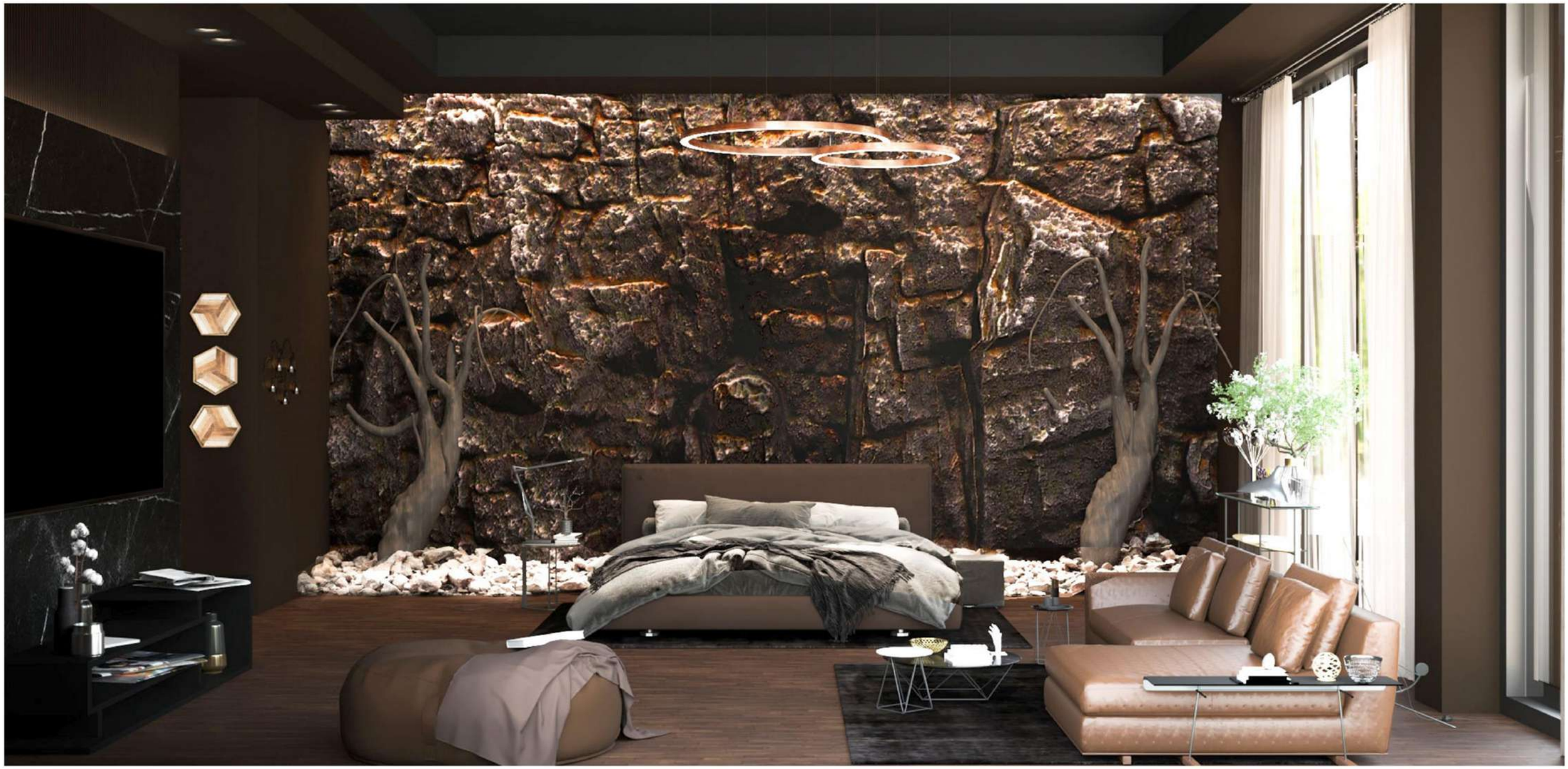
Second Floor

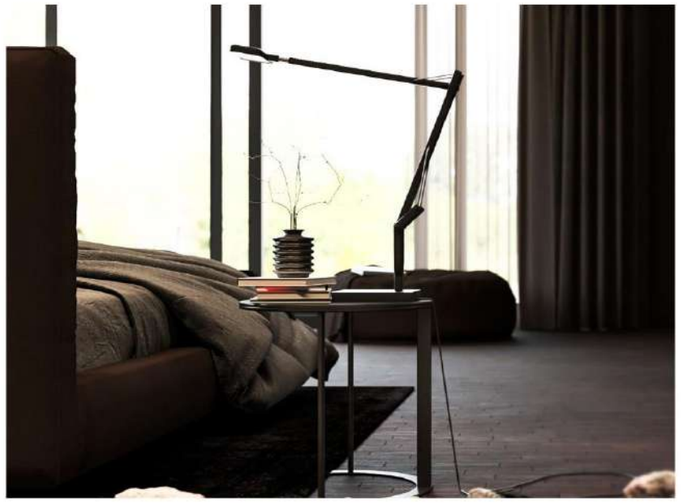
An exclusive attention is contributed to the living room and kitchen design to provide to it's residents a panoramic permanent view on the pool and surrounding natural landscape.

Gym Design

The interior design of the sport club on the third floor and the special false ceiling design by using hexagonal grids.







Master Bedroom

Master bedroom design on the third floor next to the gym & roof garden.

Site Plan

Location Of The Stable

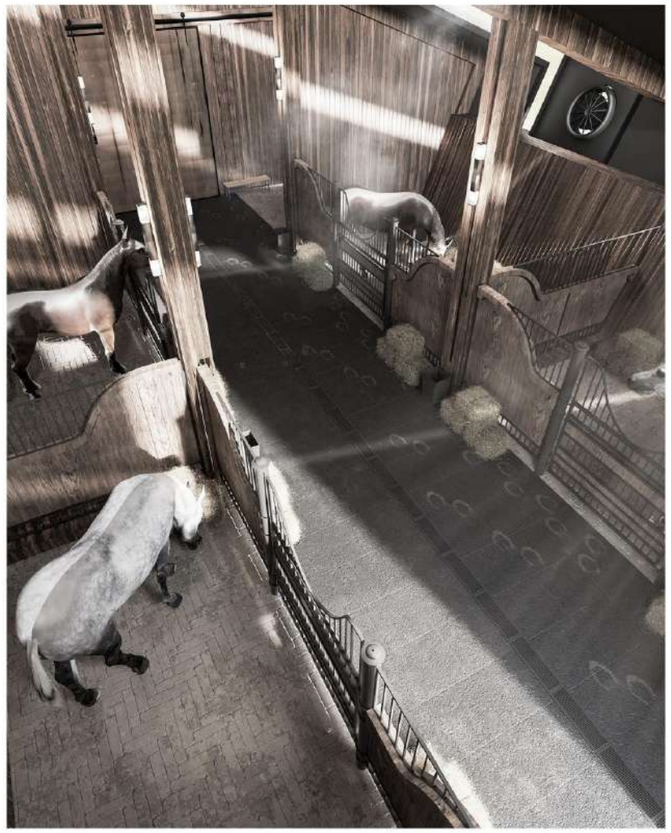
-1Basement Plan

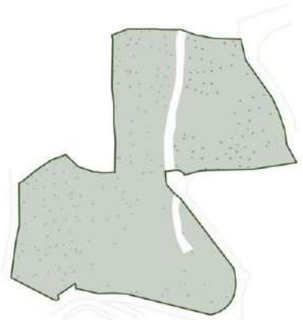
First Floor Plan

Stable

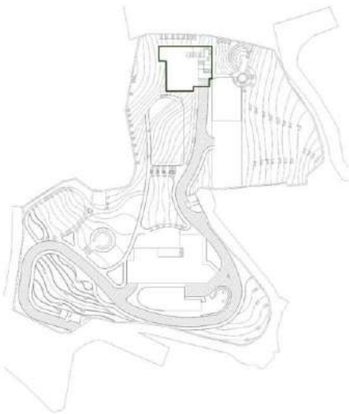
Stable Design

European style stable design for 4 horses with a horse training field.



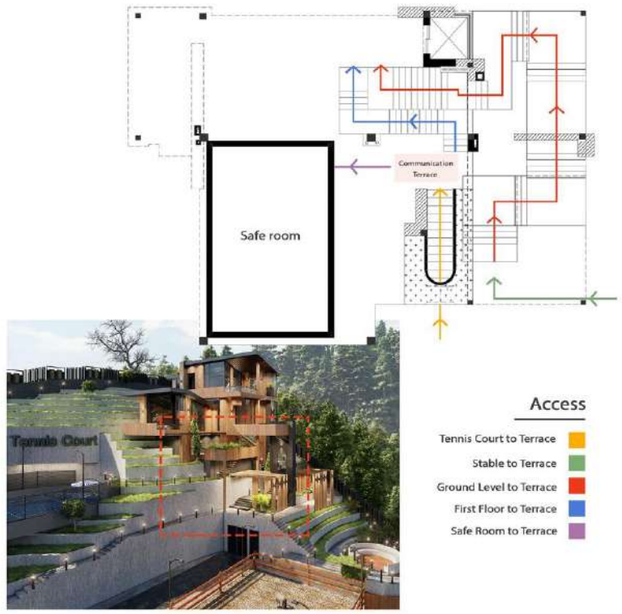


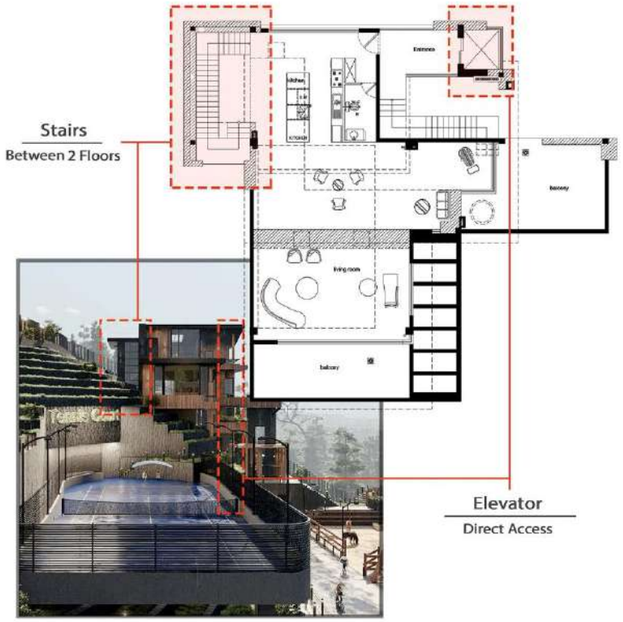
Site Plan



Location Of The Wooden Villa

First Floor Plan



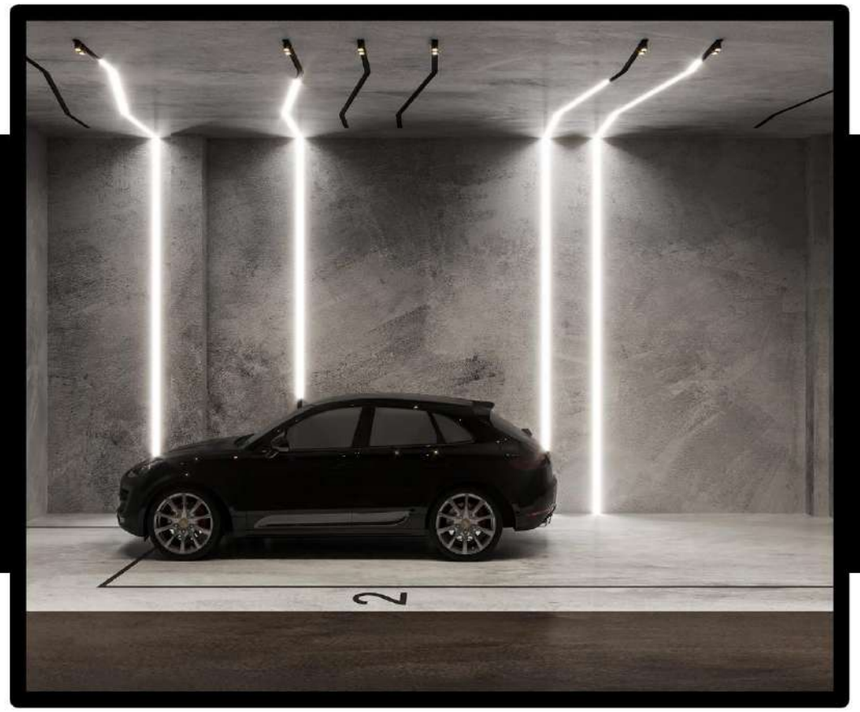


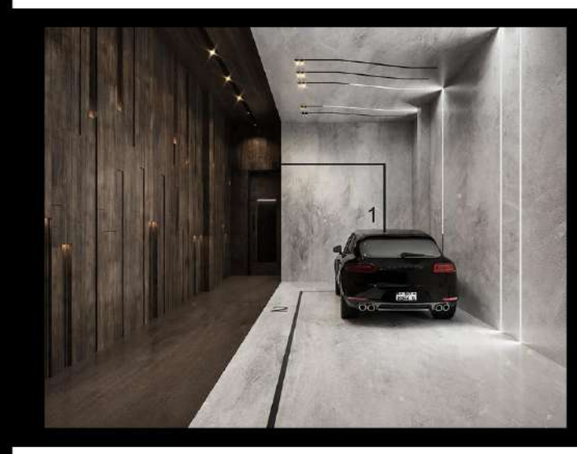
Diagram

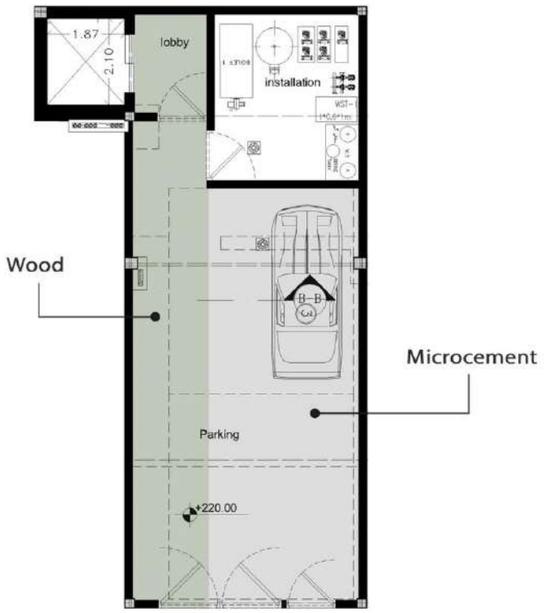
Access & View

Facade Design

This villa is completely designed with woods and gray stones are used for vertical access and creating contrast on the facade.







Parking

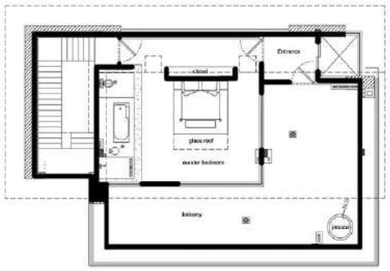
Material : microcement and wood

Designing the parking false ceiling according to roof slope.

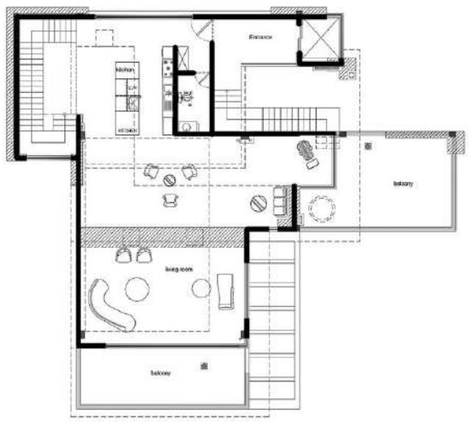
Plan

The villa includes 4 levels in hight:

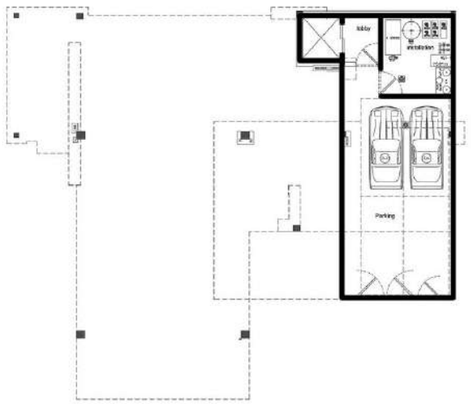
Basement : parking,lobby,installation room
Ground floor : terrace
First floor : living room & kitchen
Second floor : master bedroom



Second Floor Plan



First Floor Plan



Basement Floor Plan

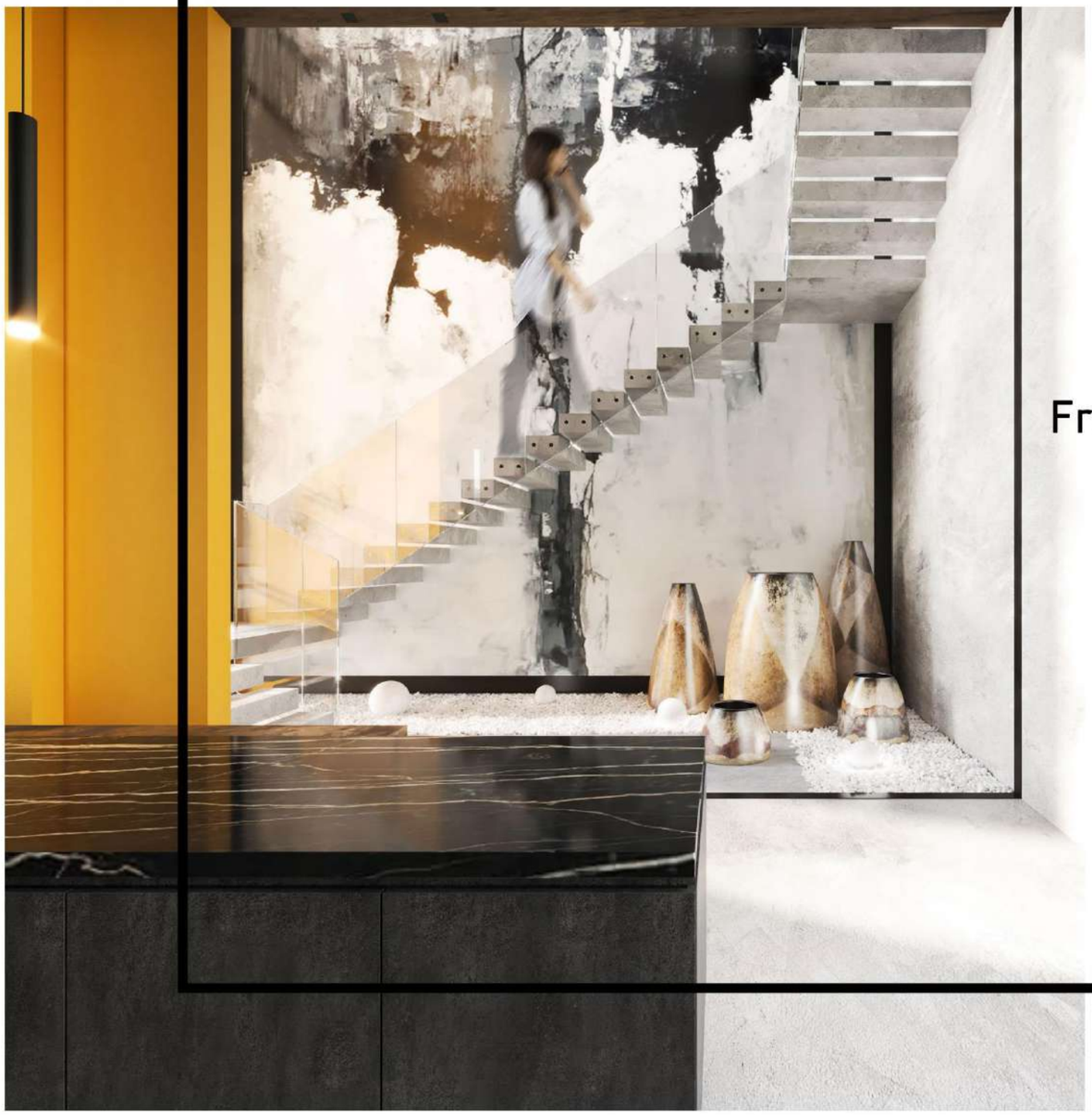
Kitchen

Material : microcement and wood

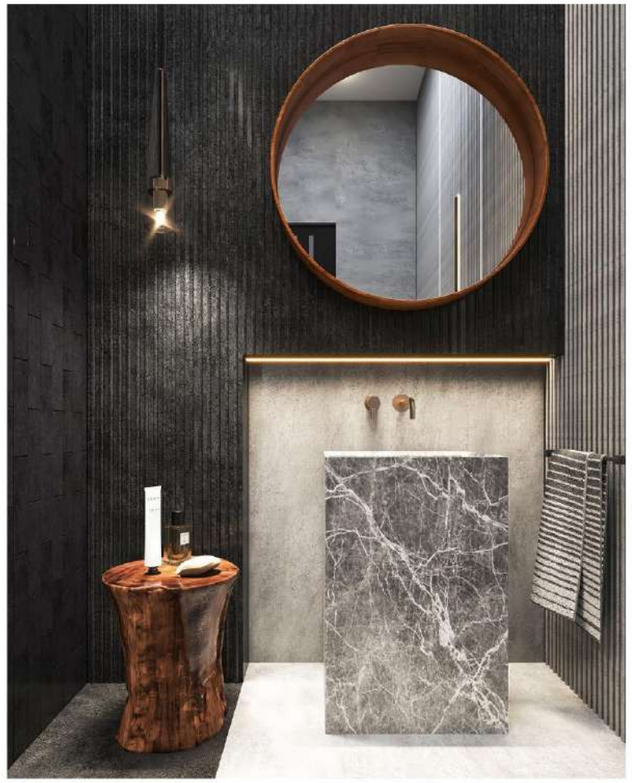
Stair case

Stair case design with a special structure so that stairs are cantilevered from the wall.

Top view



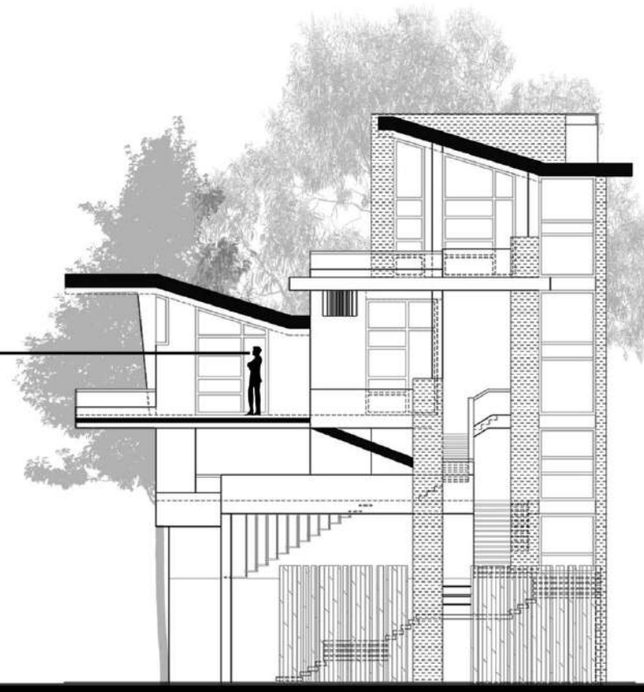
Front view



W.C

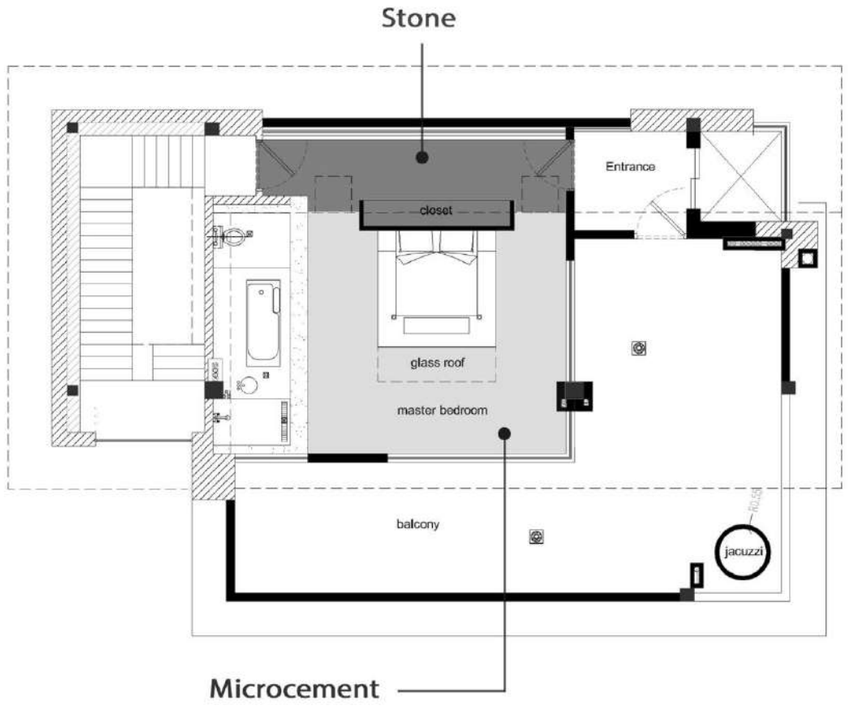
TV.Room

Design by means of large windows
for a panoramic view of the outside.



Closet

The private space of the bedroom is separated from the entrance by a closet and changing materials.



Master bedroom

Designing the master bedroom by means of microcement and linear lighting in the wall and the ceiling . Using pebbles to separate the bedroom and bathroom , designing the ceiling so that it gets the most visibility on the environment.

Terrace & Jacuzzi

Designing a wooden jacuzzi in terrace on the second floor with glass railings that you can have a good view to surrounding nature.

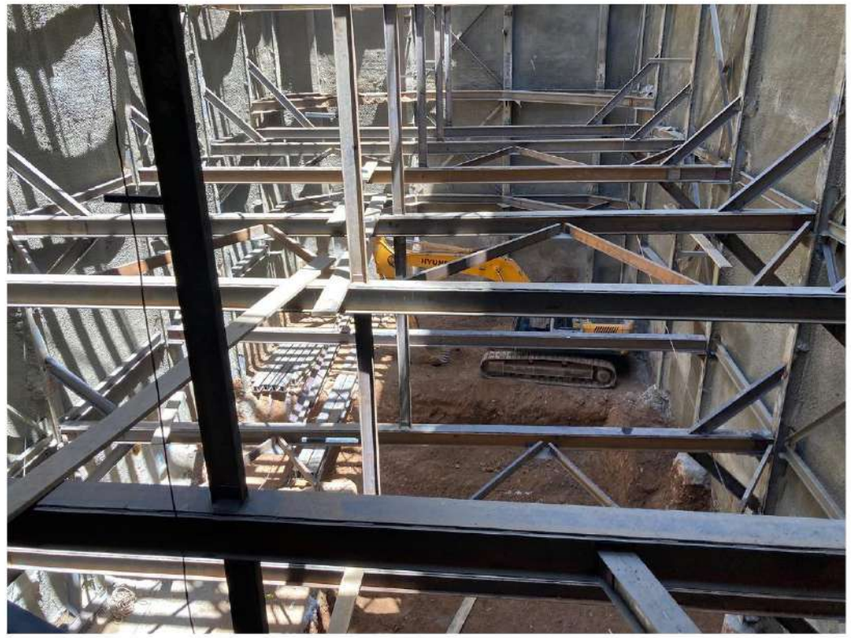
Supervision & Construction

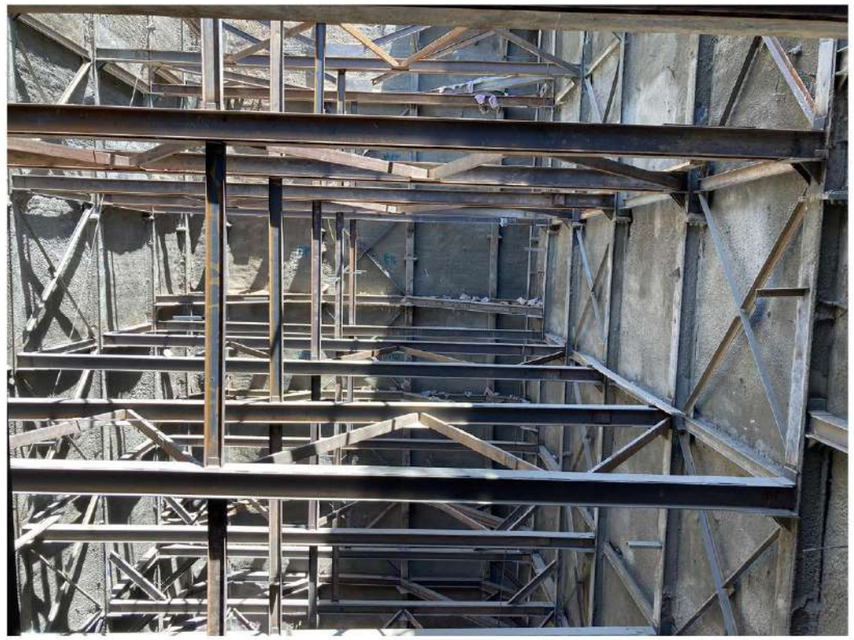
Concrete Structure

Brace Excavation (struts)

Location: District 1 - Farmanieh

کارفرما :آقای امیری
وضعیت : در حال ساخت
تاریخ شروع : ۱۳۹۹





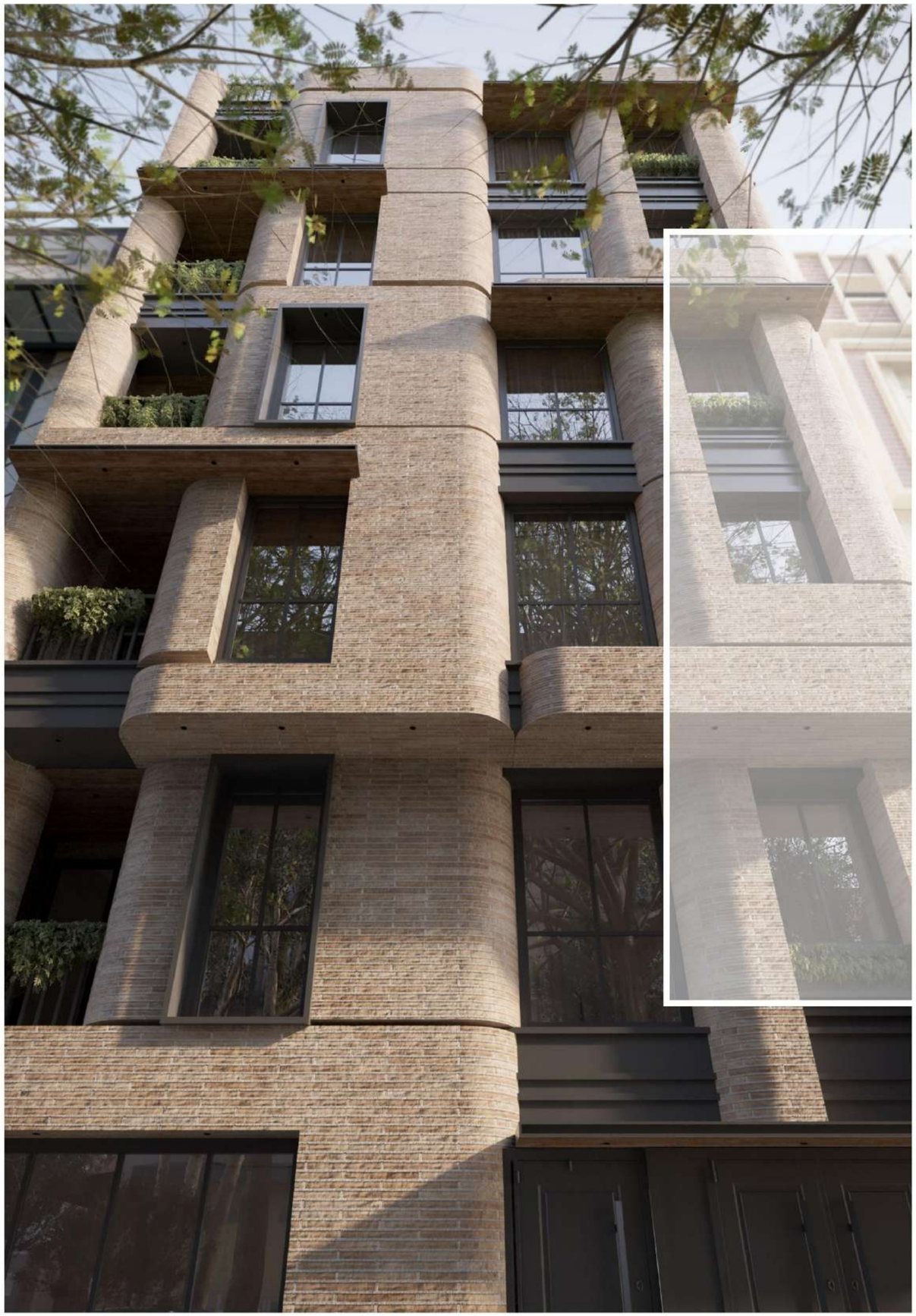
Architecture

Residential Project

Client : Mr.Taheri

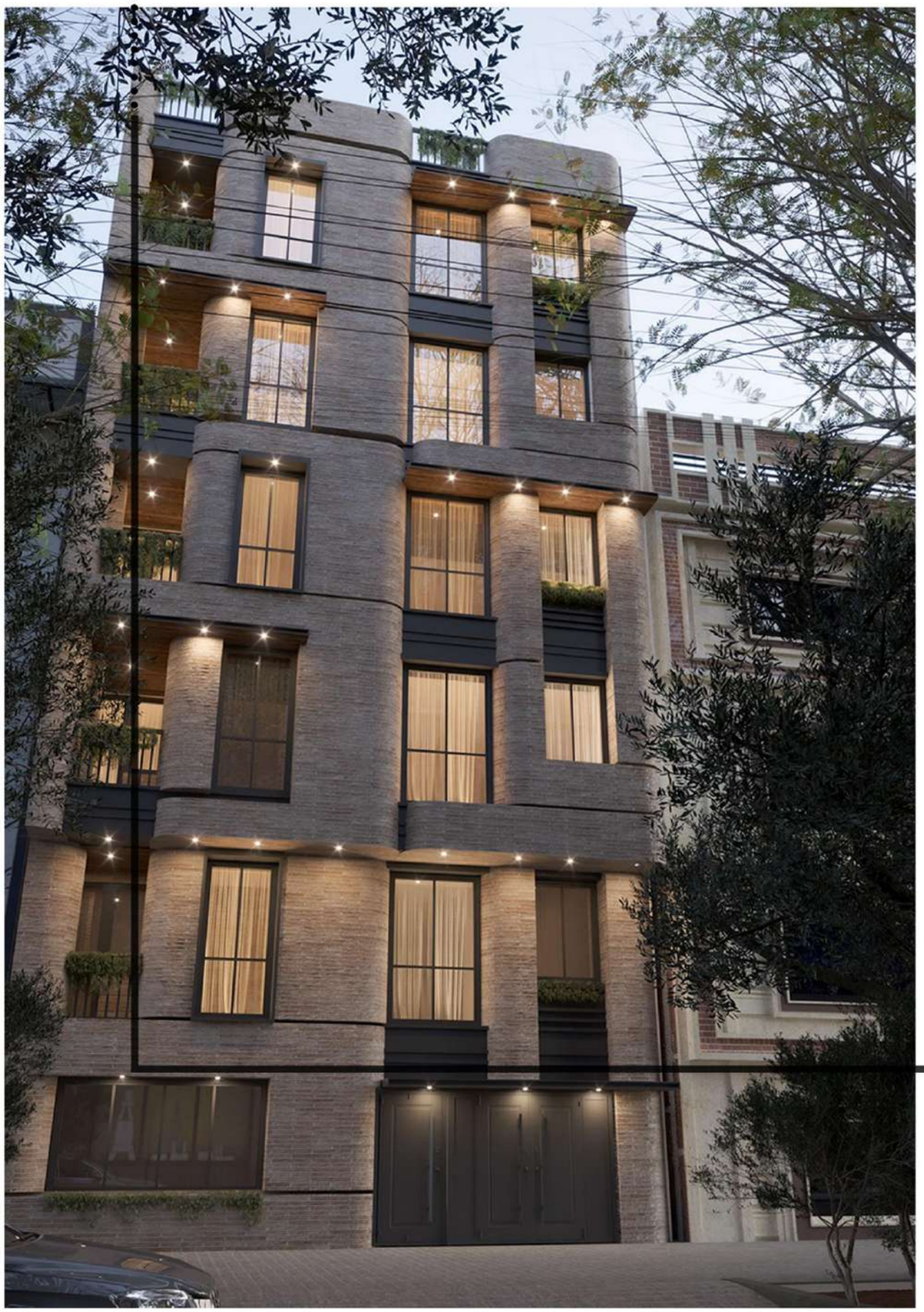
Total Area : 1395/07 m^2

Location :Tehran-District 2



Special Design

Using bricks to curve some parts of the facade
next to horizontal black metal.



Showing night rendering and facade lighting
by point lights under the shading extrusions.

Facade Lighting

Brick Material

Architecture

Residential Project

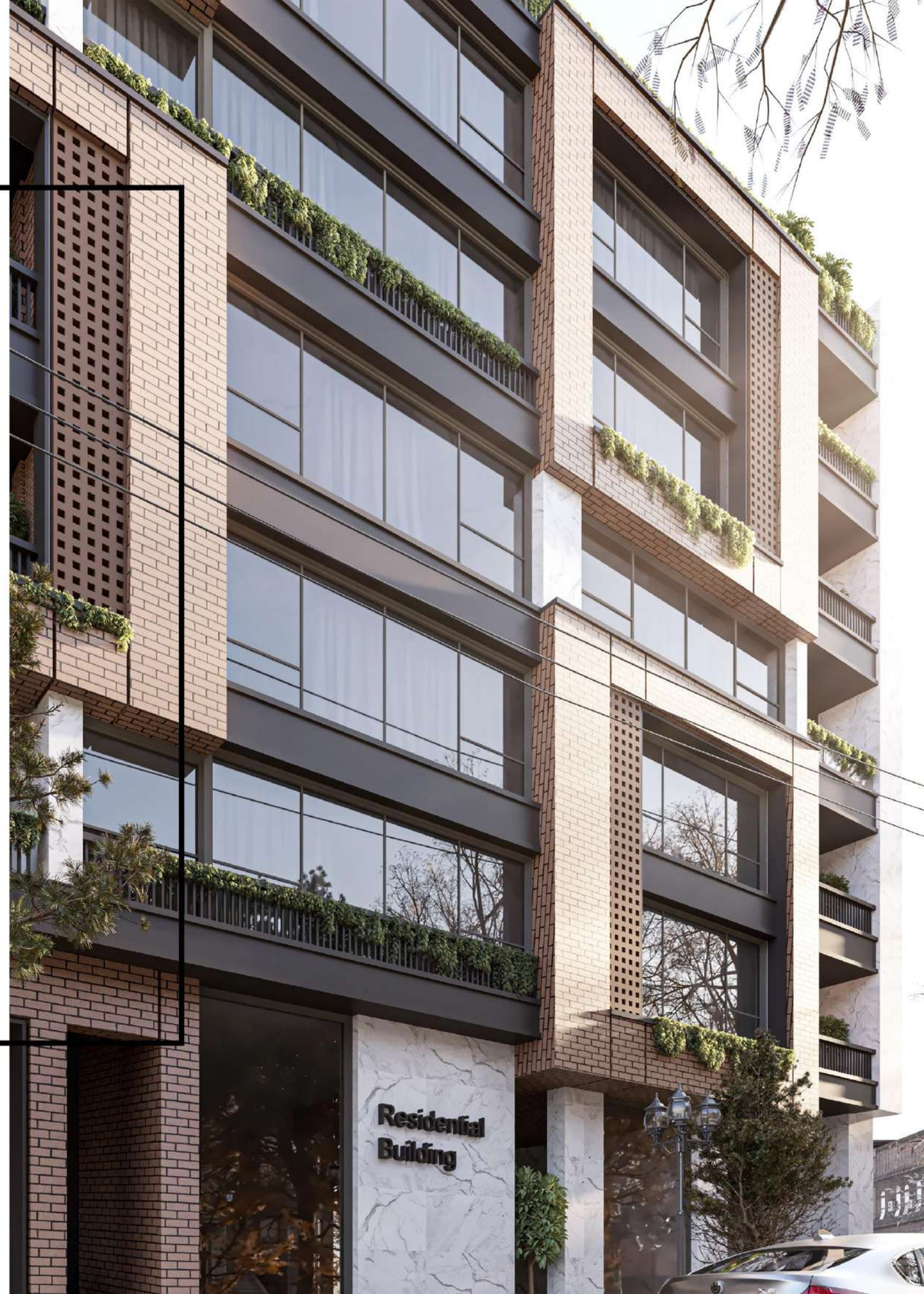
Alternative 1

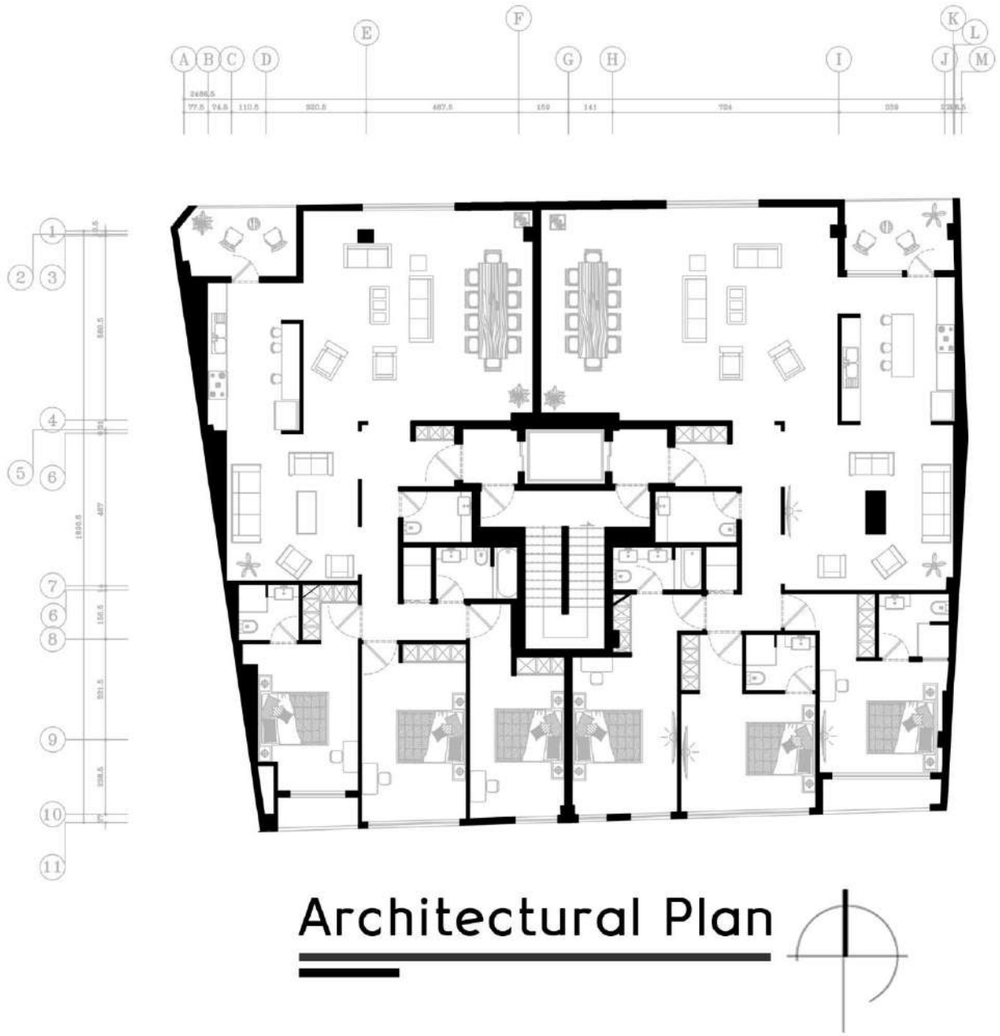
Cilent : Mr. Anabestani

Location : Tehran-Kamranieh

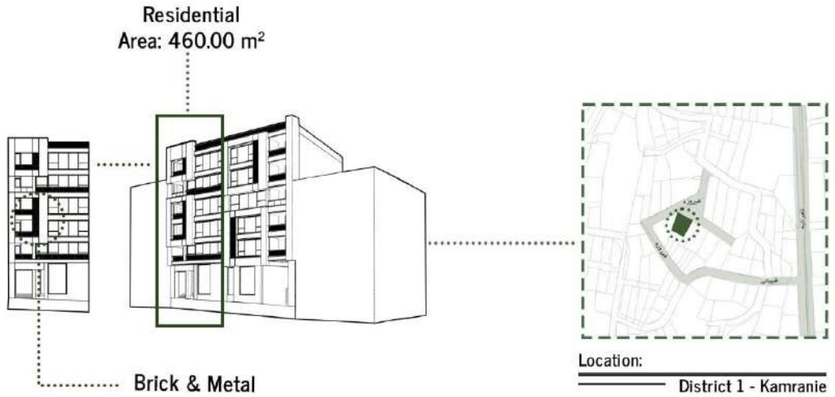
Total Area : 460.00 m^2

Material : Stone-Brick-Metal





Architectural Plan



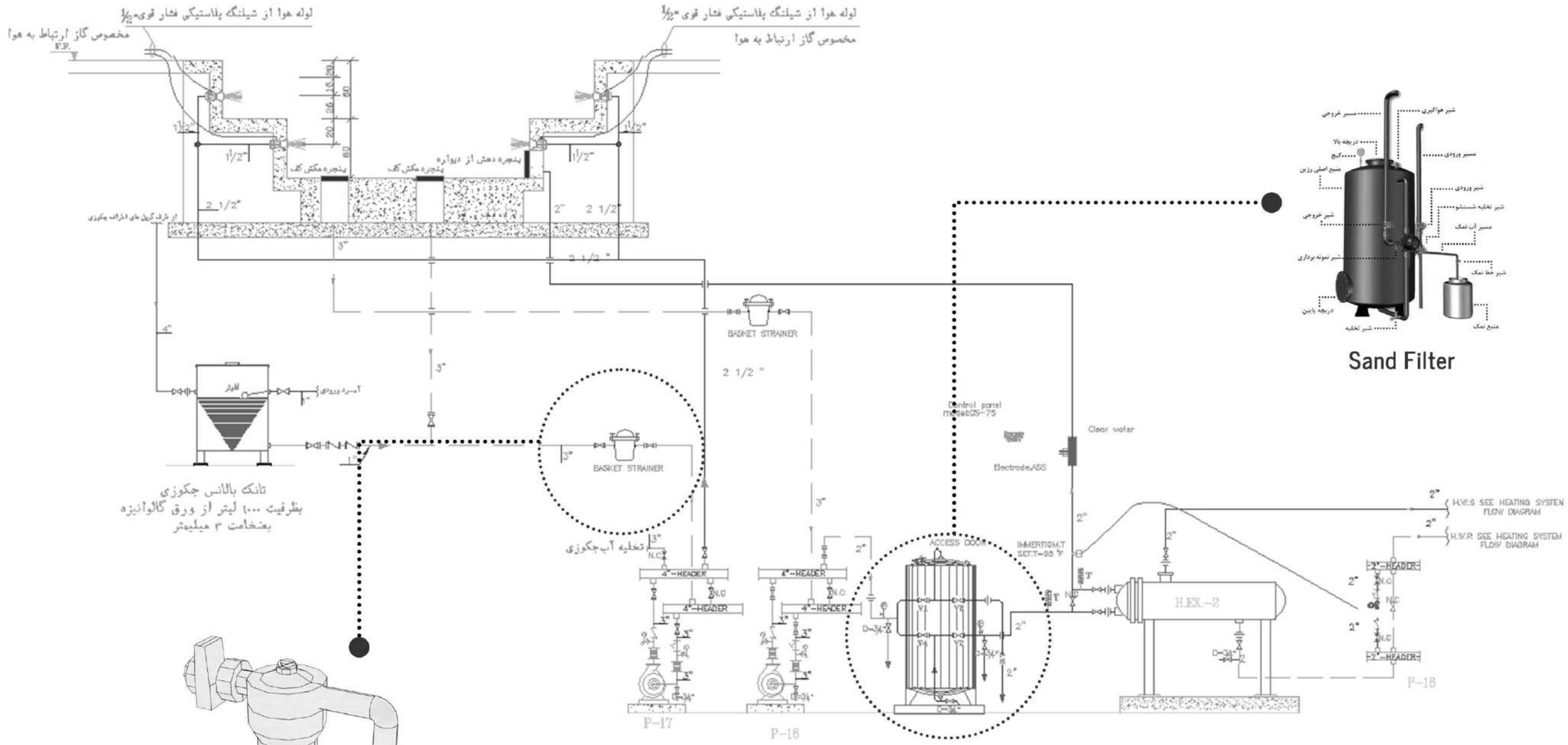
Facade

Alternative2

Material : Stone-Metal

Entrance

Mechanic



Basket Strainer

Sand Filter

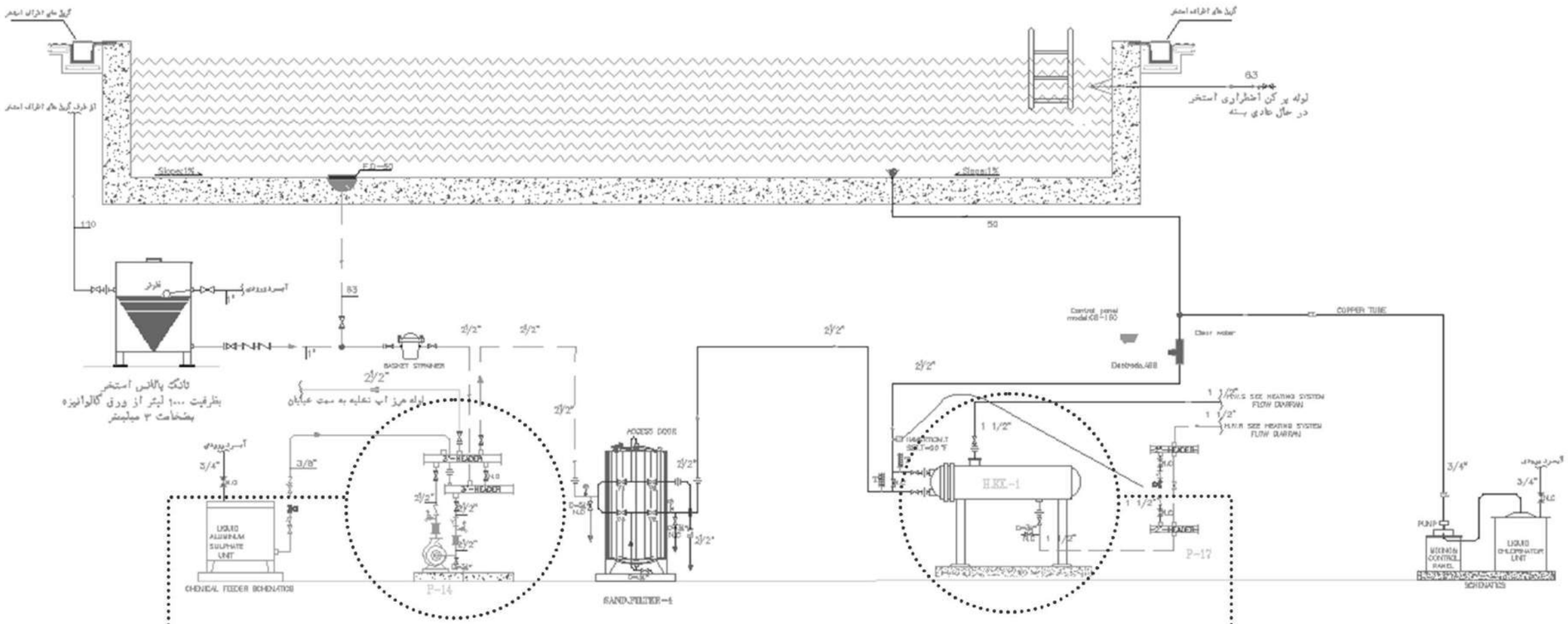
Mechanical Plan

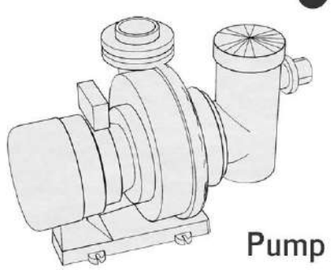
فلودیاگرام جکوزی

نحوه آبرسانی به جکوزی

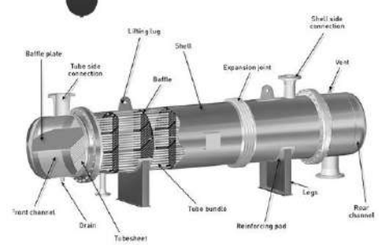
-استفاده از مبدل حرارتی پوسته لوله جداگانه به دلیل تفاوت دمای آب در جکوزی و استخر و همچنین در نظر گرفتن پمپ جداگانه برای هر بخش برای کنترل سرعت جریان آب

-استفاده از پمپ های نازل روی دیواره جکوزی جهت ماساژ





Pump



Heat Exchanger

Mechanical Plan

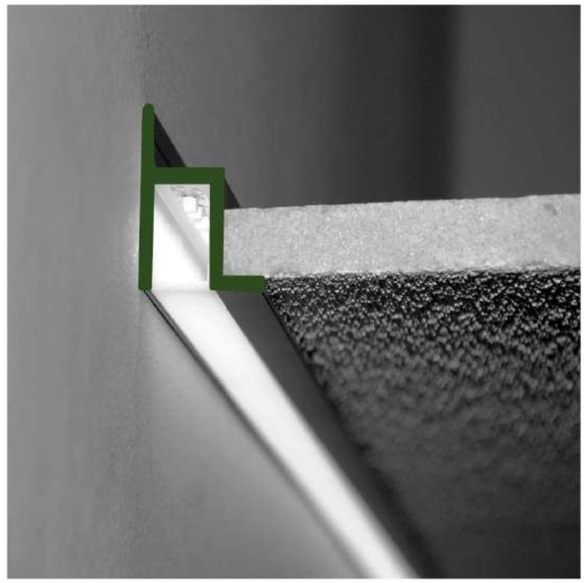
فلودیاگرام موتور خانه استخر

نحوه آبرسانی به استخر

- استفاده از روش سرریزی(به جای روش اسکیمری) برای آبرسانی جهت ذخیره آب در مرحله تصفیه و کاهش مصرف انرژی

- استفاده از موگیر پمپ مخصوص استخر،فیلتر شنی و محلول های مخصوص شیمیایی جهت تصفیه آب

Electeric



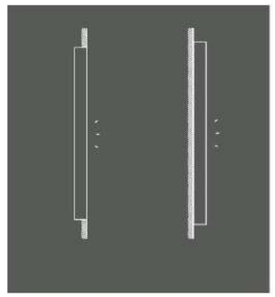
استفاده از نور خطی در نما

چراغ های خطی ضد آب (IP68) ،به دلیل داشتن مقاومت در برابر نفوذ رطوبت ، گرد و غبار و مقاومت ضربه ای بالا بهترین انتخاب برای نور پردازی نما هستند.

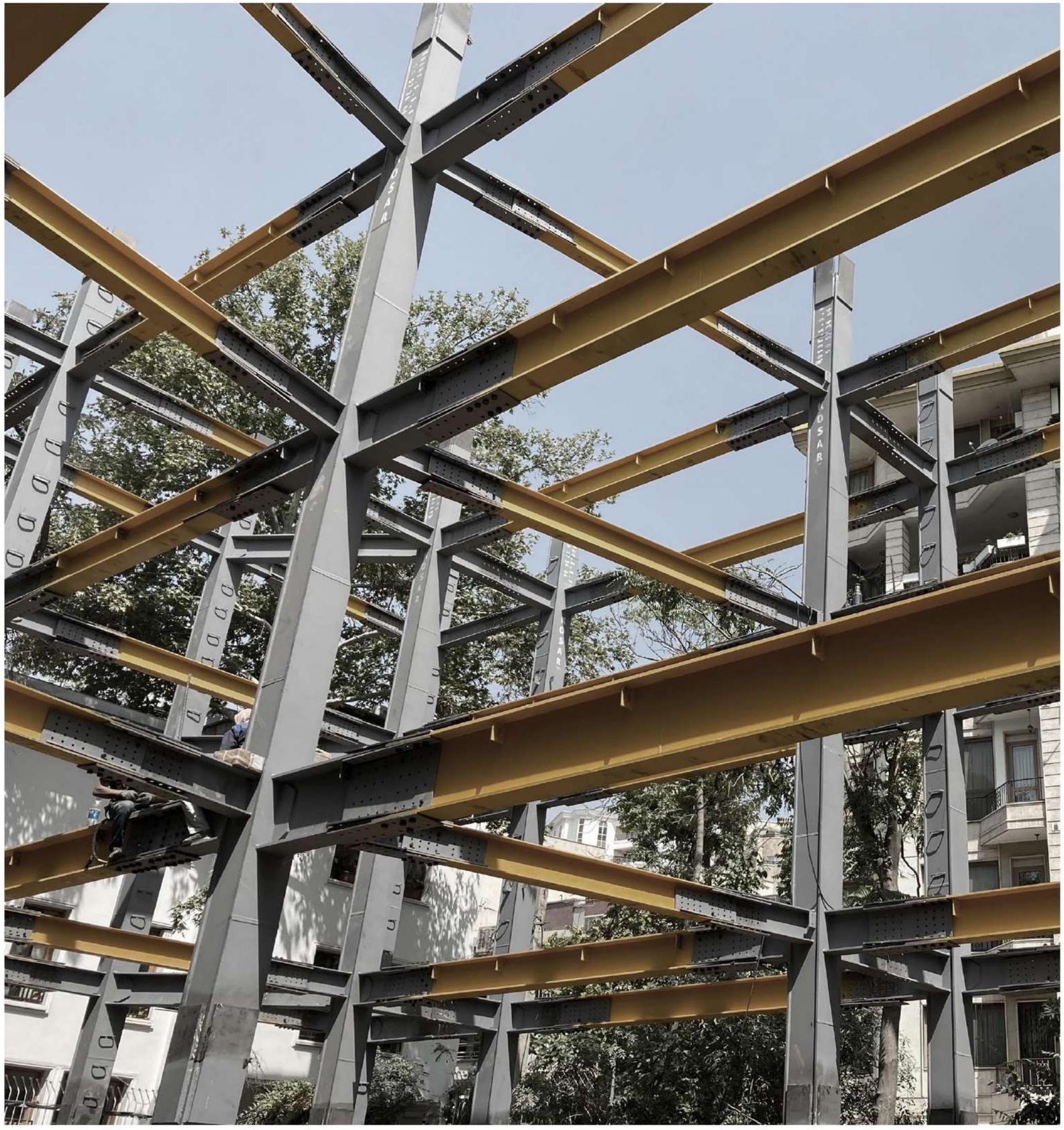
Beam Angle
Very Wide

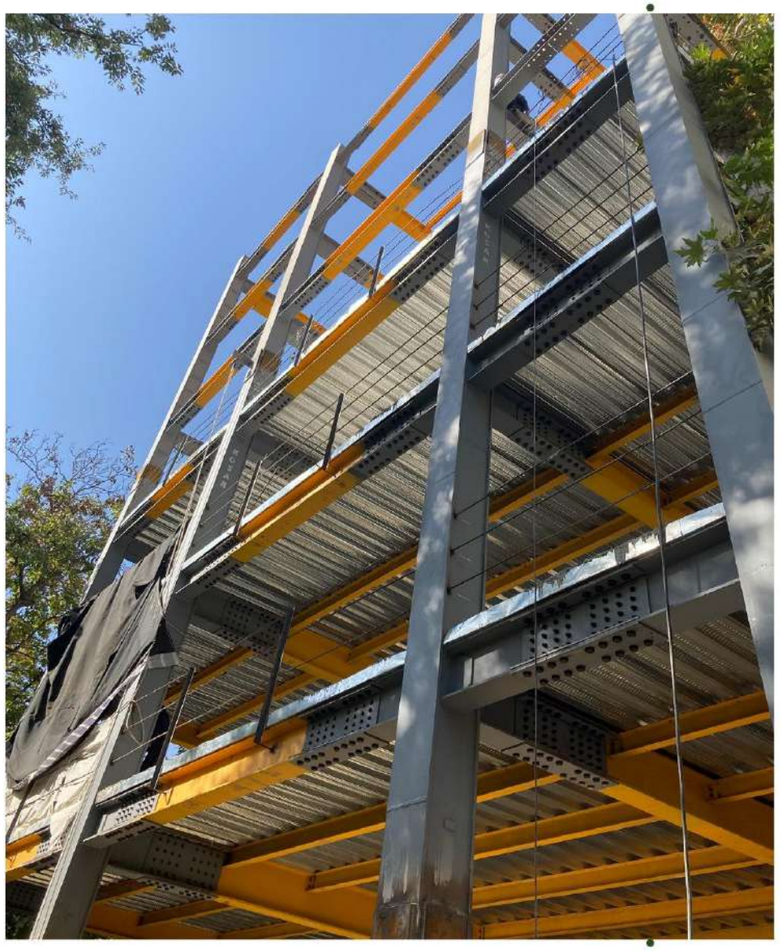
Color Temperature
3000k - 4000k

Colors
Black/ White/ Gold/ Custom



Supervision & Construction





Steel Structure

Location: District 1 - Elahie

کارفرما : جناب آقای صفوی
وضعیت : درحال ساخت
تاریخ شروع : ۱۳۹۸

Architecture

Residential project

Facade Design

Client : Mr.Tavakoli

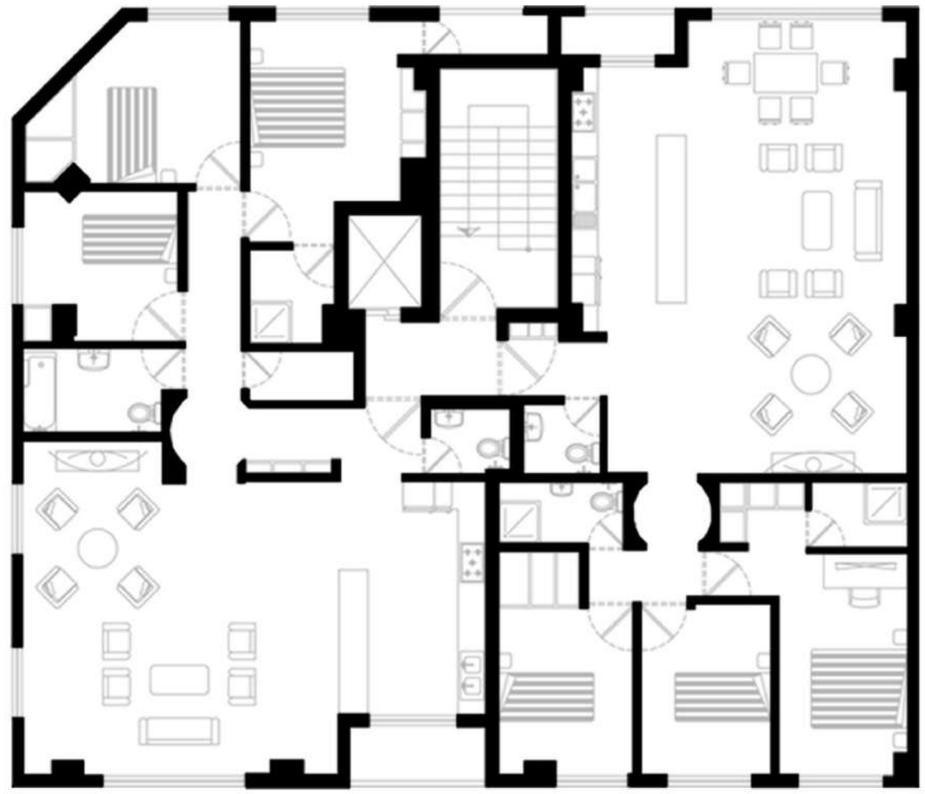
Location : Tehran-District 4

Total Area : 2106/75 m^2

Material : Stone-Metal

Design Challenge

The Laleh project is located in the vicinity of two main streets, which caused many challenges in the design process because this facade was one of the first newly constructed facades and may be a sample for its neighboring facades.



Using vertical frames next to horizontal shading devices have increased the balance and harmony between the elements of elevation.

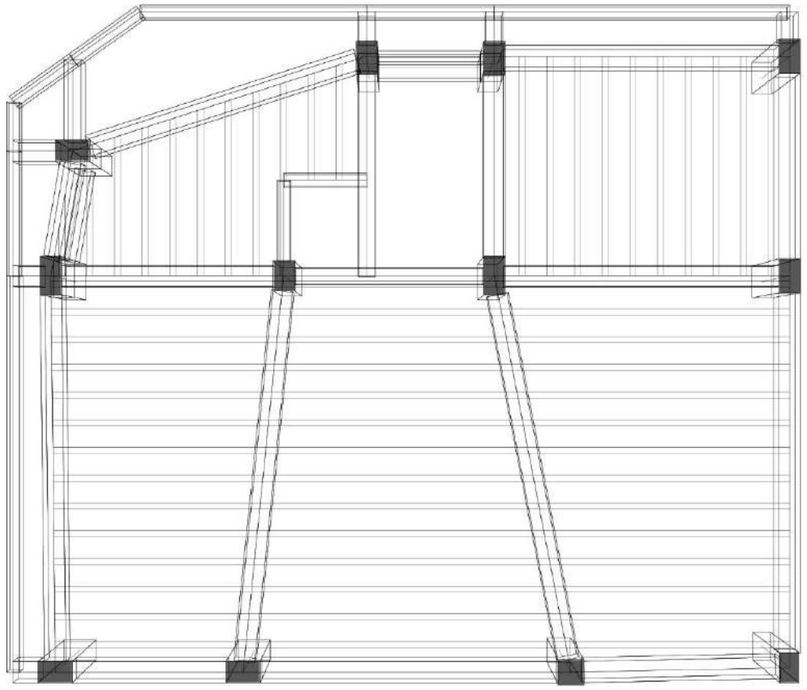
Architectural Plan

این پروژه در ۵ طبقه دو واحدی و به صورت تیپ طراحی شده است .به دلیل قرارگیری در مجاورت دو گذر همه فضاها نور طبیعی دریافت می کنند

Structure

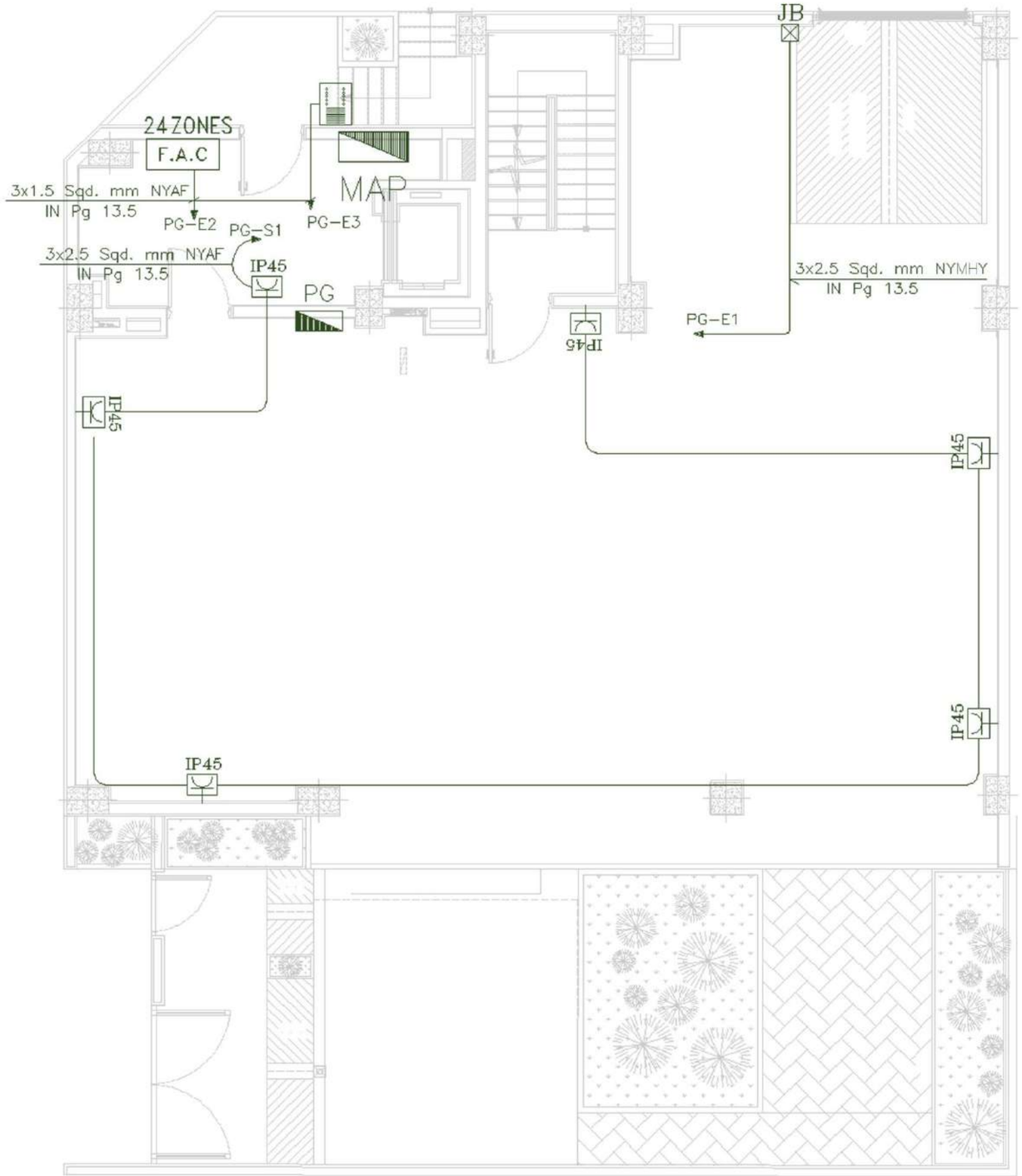
Structure

Concrete structure especially reinforced concrete structures are one of the most common type of structures used around the world.

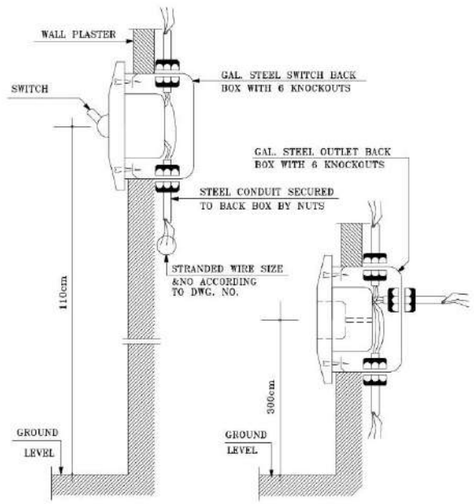


The coupling between steel and concrete allows engineers to design composite structures considering complex architectural geometries with fair costs.

Electeric



Electerical Detail



جزییات نصب کلید و پریز

Ground Floor

سیستم پریز های برق

Architecture

Residential

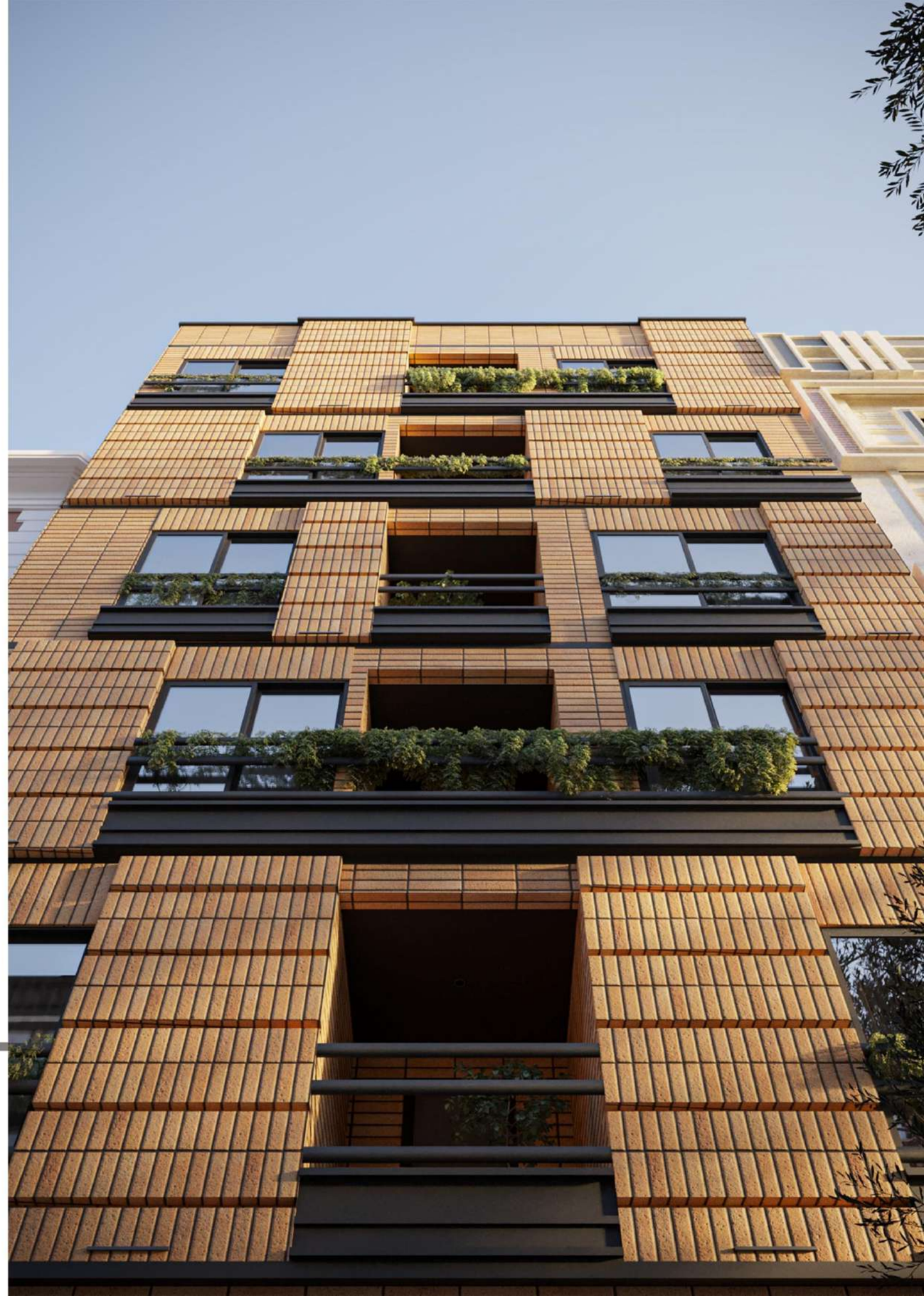
Project

Location: Tehran-District 2

Cilent : Mr. Keshtpoor

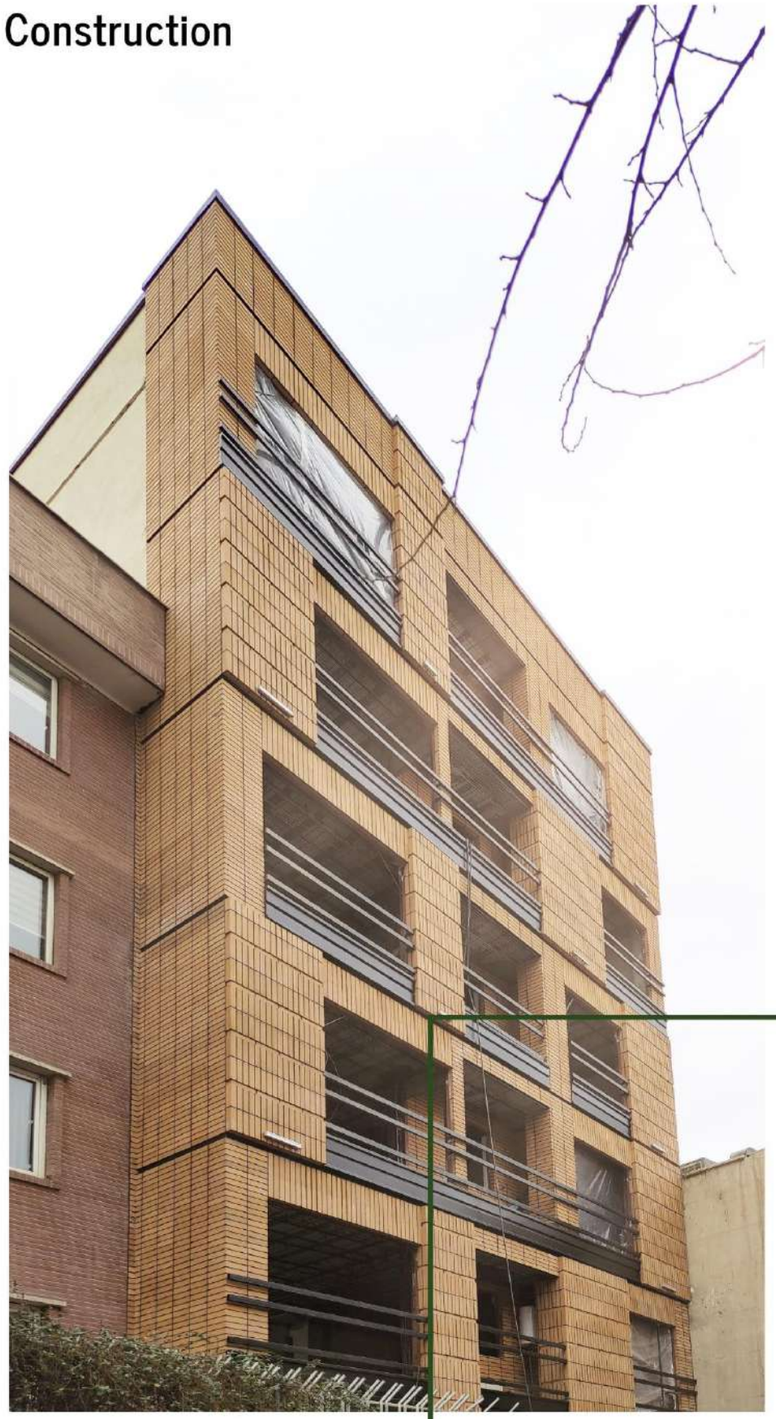
Total Area : 1195/24 m^2

Material : Brick-Metal



Design

Construction



The facade design of the building
is chosen as the best in district 2

1400.02.15

نمای برتر و برگزیده منطقه ۲

Supervision & Construction

Location: District 1 - Elahie

Guard Structure

The guard structure can be dismantled when part of the structure is under construction, which can withstand landslides.

کارفرما : پروژه مهرگان
وضعیت : در حال ساخت
تاریخ شروع : ۱۳۹۹

Architecture

Pavilion Design

Facade Design Of The Army Hospital Pavilion

Client : 501 Army Hospital

Location : Tehran-District 6

Total Area : 2480 m^2

Material : Cement

Lighting

The use of cement material with two contrasting colors and the concept of using linear fixtures on the body of the facade for lighting.

Facade Design Of The Army Hospital Pavilion

Client : 501 Army Hospital

Location : Tehran-District 6

Total Area : 2480 m^2

Material : Cement

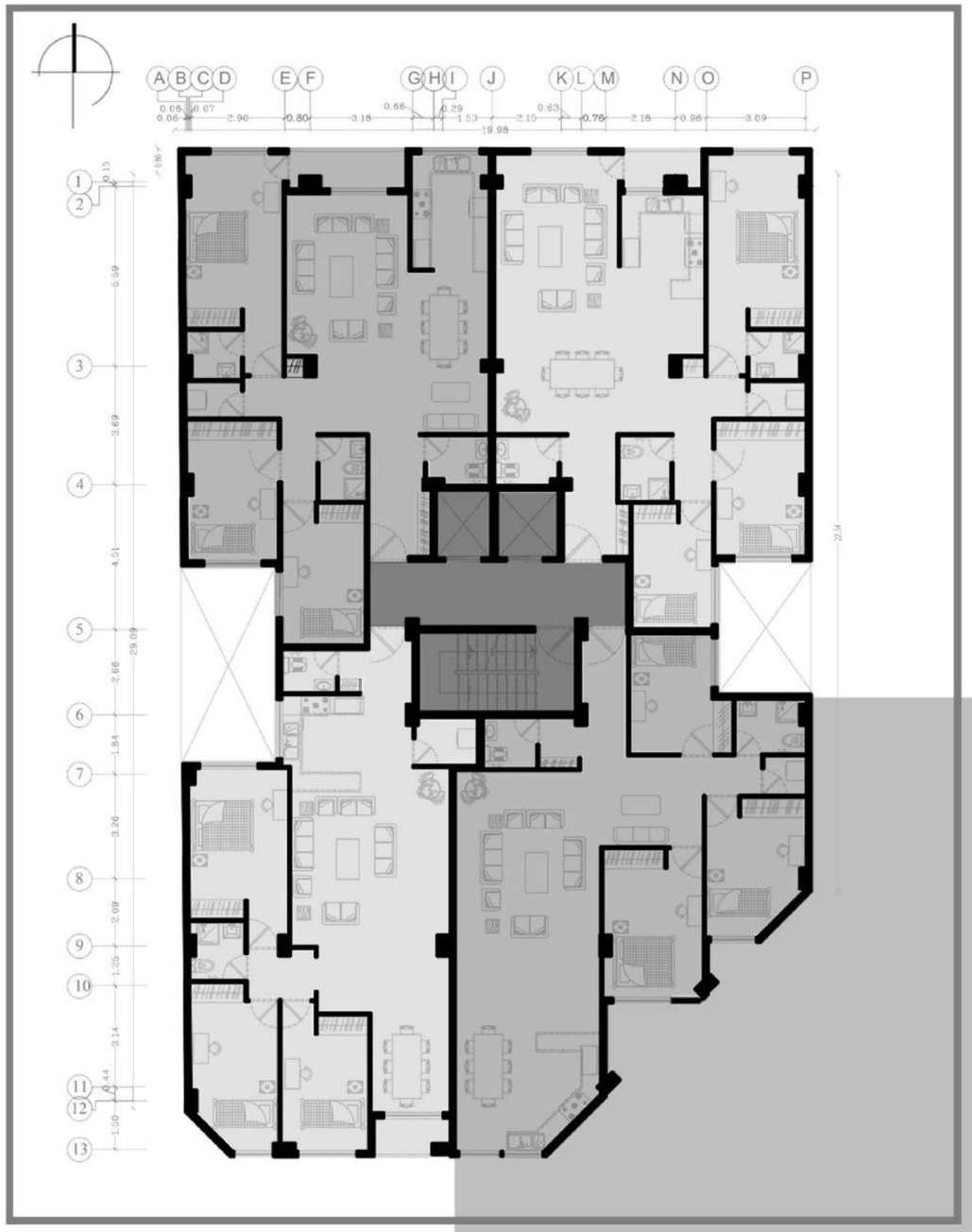
Architecture

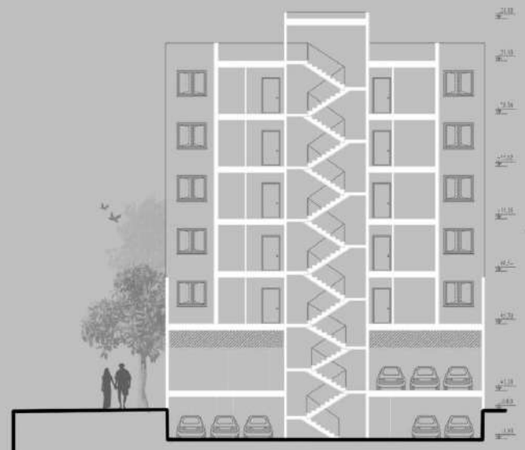
Residential project

Client :	Mr. Anabestani
location :	Reihani-Street
Total Area :	3932.00 m^2
Material :	Stone-Brick-Metal

Architectural plan

این طرح شامل ۵ طبقه ۴ واحدی به متراژ های ۱۲۰و۱۳۰ متری است که به صورت تیپ طراحی شده اند . به دلیل قرارگیری این پروژه در مجاورت دو گذر اکثر فضا ها نور طبیعی دریافت میکنند .





Construction

Design

Material : Stone-Brick-Metal

Match between
design & construction

Supervision & Construction

نمایش تاسیسات مکانیکی به صورت اکسپوز

اجرای سقف پیش تنیده پس کشیده

Guard Structure

Location: District 1 - Nobonyad

کارفرما : پروژه موج خاور
وضعیت : اتمام اسکلت
تاریخ شروع : ۱۳۹۷

Architecture

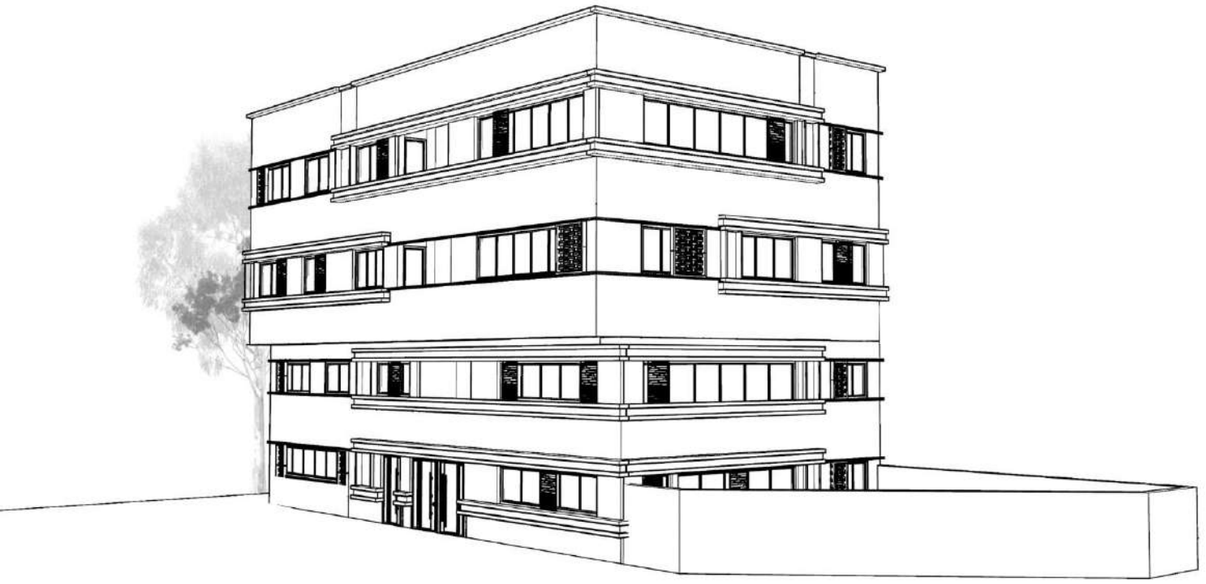
Residential project

Cilent : Mr. Mollanejad

Location : Tehran-Area 22

Total Area : 460.00 m²

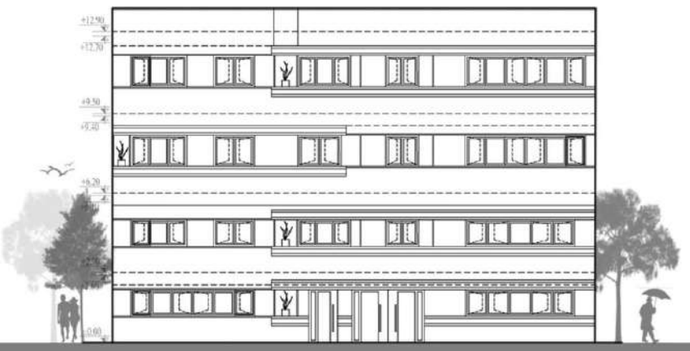
Material : Stone-Brick-Metal



نمای برتـر و برگزیده منطقه ۲۲

The facade design of the building is chosen as the best in district 22.

(1400/08/25)



Architecture

Novin Insurance

The Proposed Concept Of The Novin Insurance Project

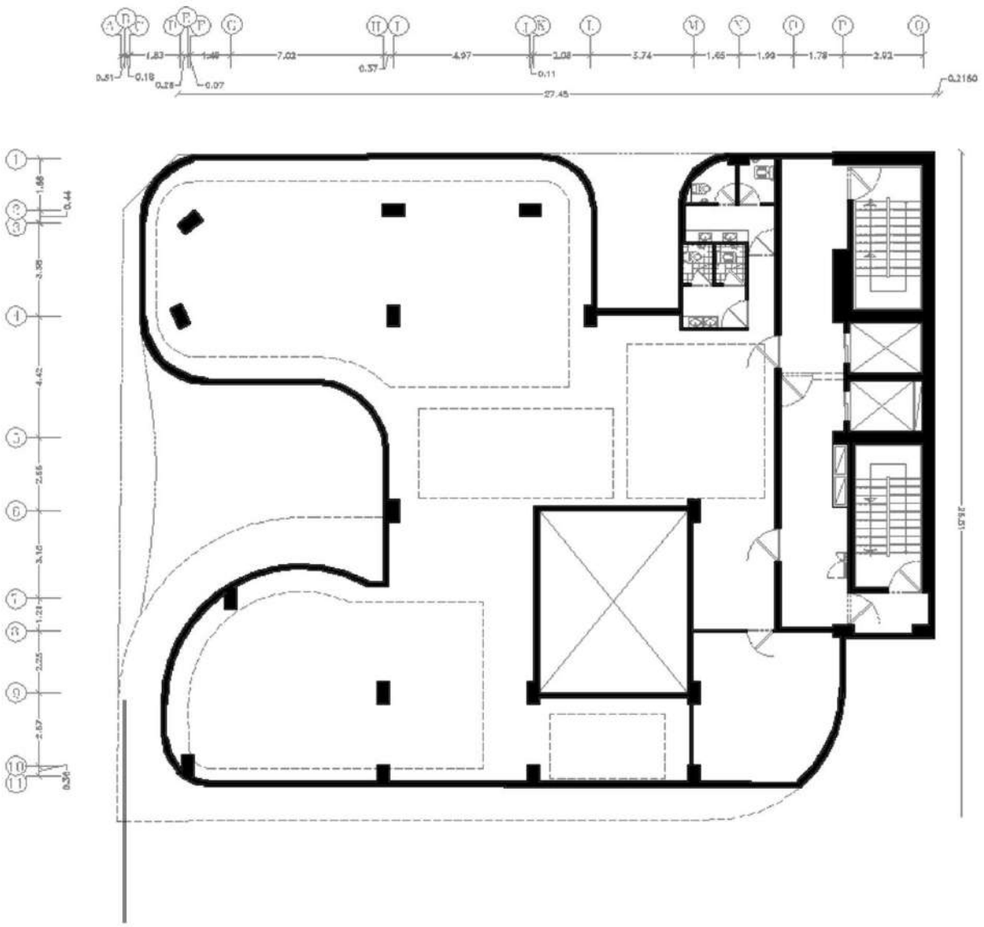
The proposed concept of this project is designed according to it's special location by subtracting some curved shapes from the whole volume.

Client : Novin Insurance Project

Location : Mirdamad

Total Area : 8594/78 m^2

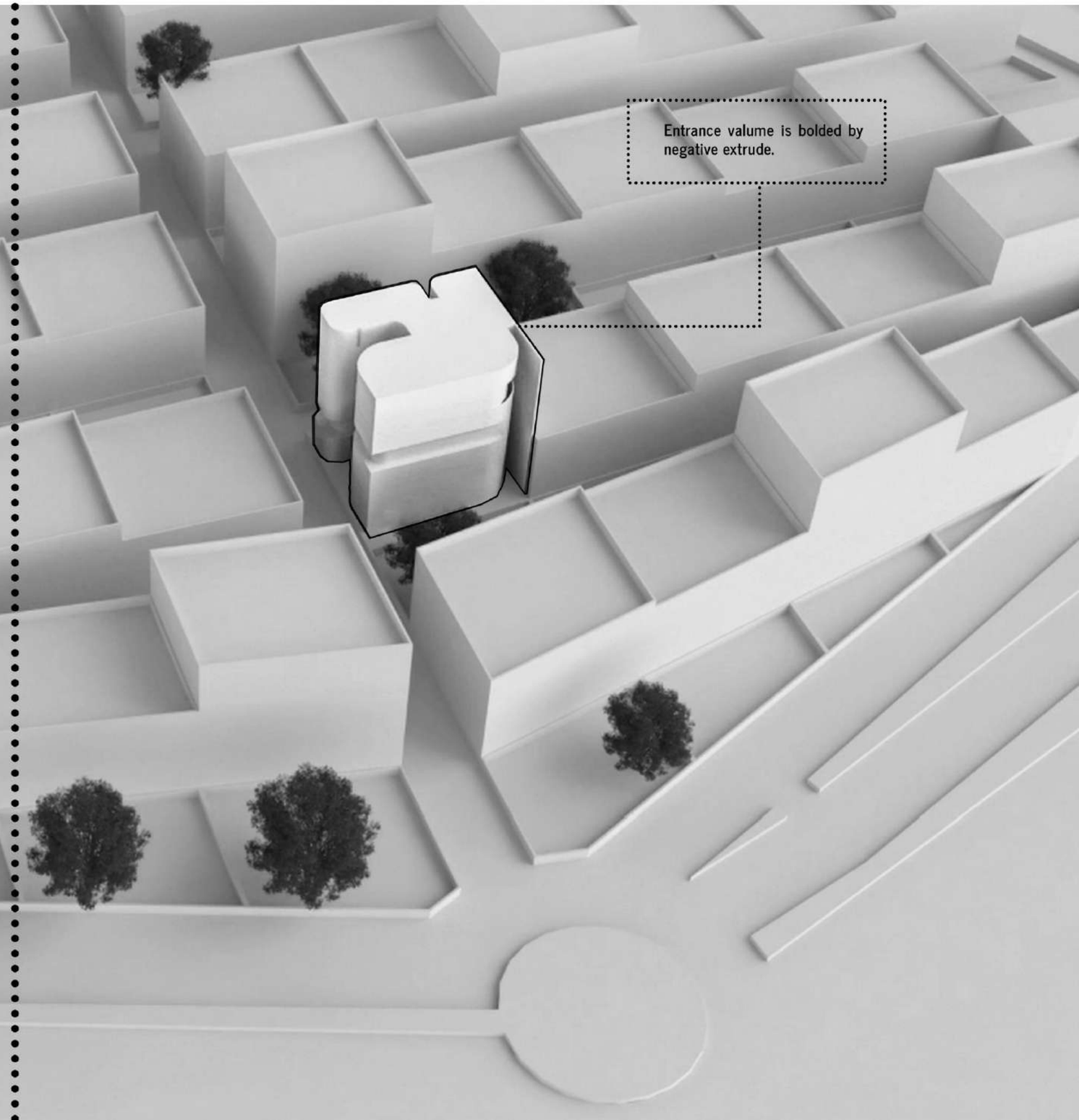
Administrative project



Architectural plan

پروژه بیمه نوین شامل 5 طبقه اداری روی همکف و 6 طبقه پارکینگ زیر همکف می باشد . این پروژه در مجاورت دو گذر قرار دارد و دارای دو ورودی کاملا مجزا از هر دو گذر می باشد

Concept Design



Supervision & Construction

Foundation

Foundation is the lowest part of the building or the civil structure that is in direct contact with the soil safely.

کارفرما :آقای نجفی
وضعیت : در حال ساخت
تاریخ شروع : ۱۳۹۷

Location: District 1 - Niavaran

Waffle Roof

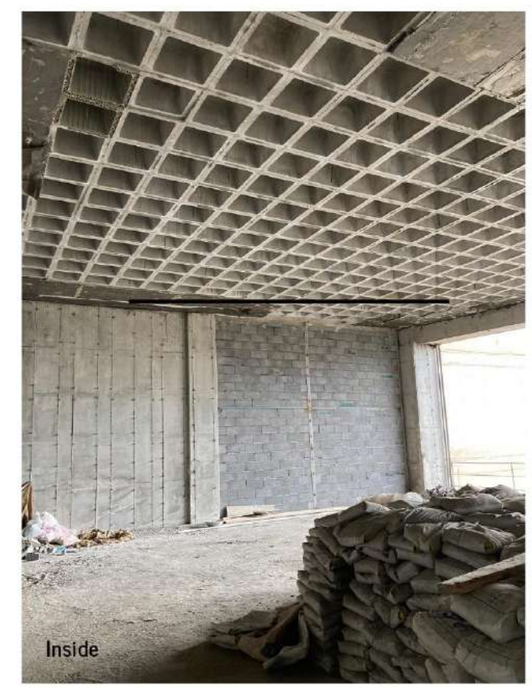
Waffle roof is a type of slab in which the beams are in two perpendicular directions and is used in different dimensions depending on the project.

One sided

Two sided

Location: District 1 - Bookan

کارفرما : آقای نجفی
وضعیت :در حال ساخت
تاریخ شروع : ۱۳۹۷



نشانی:تهران-میدان هروی-خیابان
وفامنش-نبش کوچه امید-پلاک ۱۰
طبقه۲-واحد۳

22987753-22987752

09362163200

raf_group@hotmail.com

-rafgroup-

CEO : Mohammad Anabestani

09127952006