High Rise Residential Buildings in Sulaimaniyah

DANIA CITY
better life style

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"Dania City, the most luxurious design in Sulaimaniyah"

High Rise Buildings:

High-rise buildings became possible with the invention of the elevator (lift) and less expensive, more abundant building materials. The materials used for the structural system of high-rise buildings are reinforced concrete and steel. Most North American style skyscrapers have a steel frame, while residential blocks are usually constructed of concrete. There is no clear difference between a tower block and a skyscraper, although a building with forty or more stories and taller than 150 m (490 ft) is generally considered a skyscraper.[2]

High-rise structures pose particular design challenges for structural and geotechnical engineers, particularly if situated in a seismically active region or if the underlying soils have geotechnical risk factors such as high compressibility or bay mud. They also pose serious challenges to firefighters during emergencies in high-rise structures. New and old building design, building systems like the building standpipe system, HVAC systems (heating, ventilation and air conditioning), fire sprinkler system and other things like stairwell and elevator evacuations pose significant problems. Studies are often required to ensure that pedestrian wind comfort and wind danger concerns are addressed. In order to allow less wind exposure, to transmit more daylight to the ground and to appear more slender, many high-rises have a design with setbacks.

Apartment buildings have technical and economic advantages in areas of high population density, and have become a distinctive feature of housing accommodation in virtually all densely populated urban areas around the world. In contrast with low-rise and single-family houses, apartment blocks accommodate more inhabitants per unit of area of land and decrease the cost of municipal infrastructure.

Dania city Residential High Rise:

Location:	Sulaimaniyah – Ibrahim Ahmad Hills
Area:	115,000 sq.m
Project Type:	High Cost Residential Apartments and Luxury Villas

Dania city far away from Sulaimaniyah City Center by 2km, and from international airport by 10km.

Project Content:

6 Buildings / 33 story
2 Buildings / 20 Story
24 Villas / 4 Story

Site Plan and buildings distribution:

Building Contents - Basements

- 3 Floor Basements / Underground Car Park + Store/Flat
- More than 120,000sq.m Built area
- Each Flat has 2 Parking Space

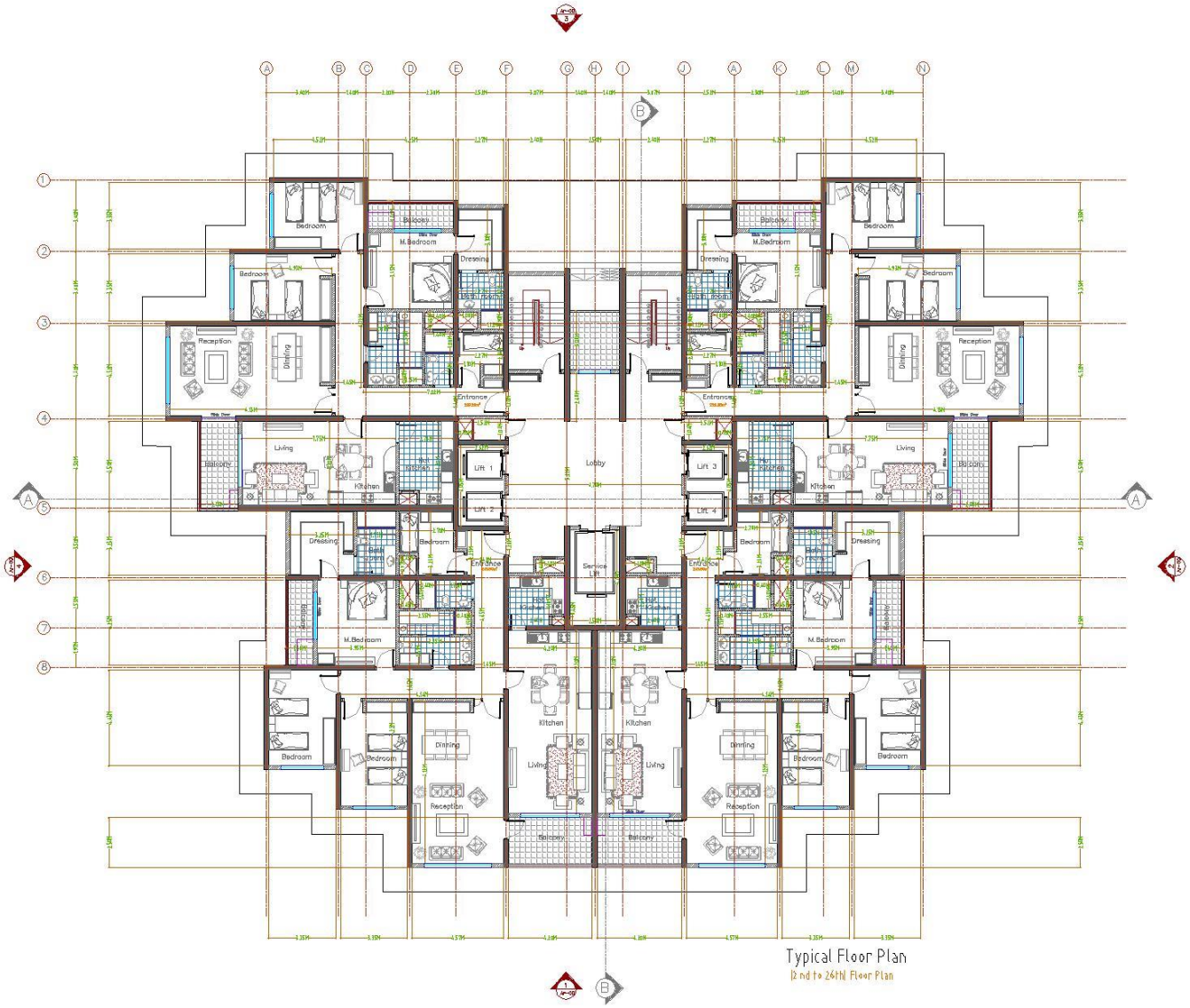
Typical Floors:

Each Floor contain 4 Flats with two different Types (A & B).

- A-Type: Located in the Front views of the buildings, which are 245 sq.m net area.
- B-Type: Located in the Back views of the buildings, which are 230 sq.m net area.
- Each Building Contain 5 Elevators (1 Service+ 4 Passengers)
- Two Staircases (1 Fire Exit + 1 Normal Stair)

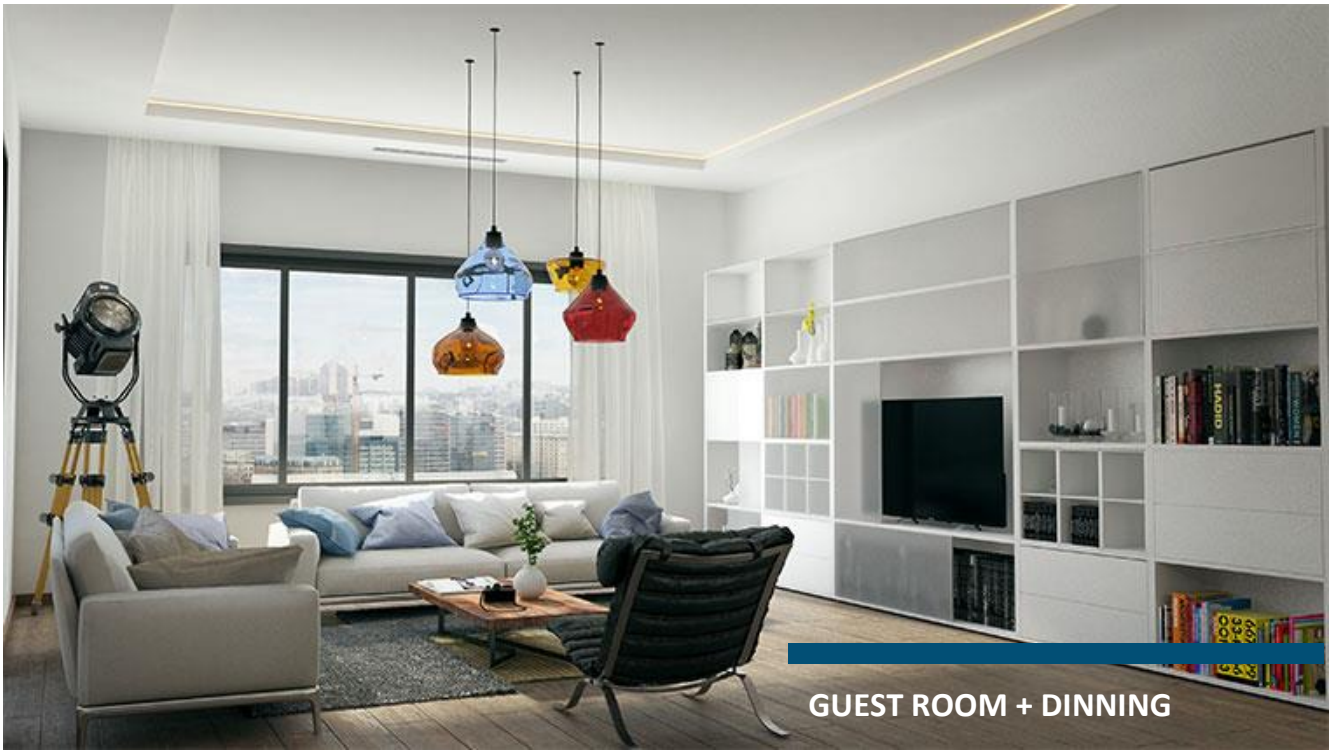
Top 2 Floors:

- 4 Duplex Flats with two different Types (A&B)



- Type A / 245 sq.m

Entrance
Corridor
Hot Kitchen
Kitchen and Living Room
Balcony
Guest Room and Dinning
Child Bed-1
Child Bed-2
Master Bedroom + Dressing+ Bathroom
Maid Room
General Bathroom
Turkish bath and Laundry



GUEST ROOM + DINNING

KITCHEN + DINNING

- Type B / 230sq.m

Entrance
Corridor
Hot Kitchen
Kitchen and Living Room
Balcony
Guest Room and Dinning
Child Bed-1
Child Bed-2
Master Bedroom + Dressing+ Bathroom
Maid Room
General Bathroom
Turkish bath and Laundry

- Duplex Type A

Lower Floor

Entrance
Corridor
Hot Kitchen
Kitchen + Sitting Room
Balcony
Bedroom-1
Bedroom -2
Balcony
Master Bedroom + Dressing
Maid Room
Turkish bath
Main Bathroom

Upper Floor

Entrance
Corridor
Laundry
Kitchen + Living + Guest Room
Void
Terrace
Balcony
Master bedroom
Dressing
Maid Room
Main Bathroom + Jacuzzi

- Duplex Type B

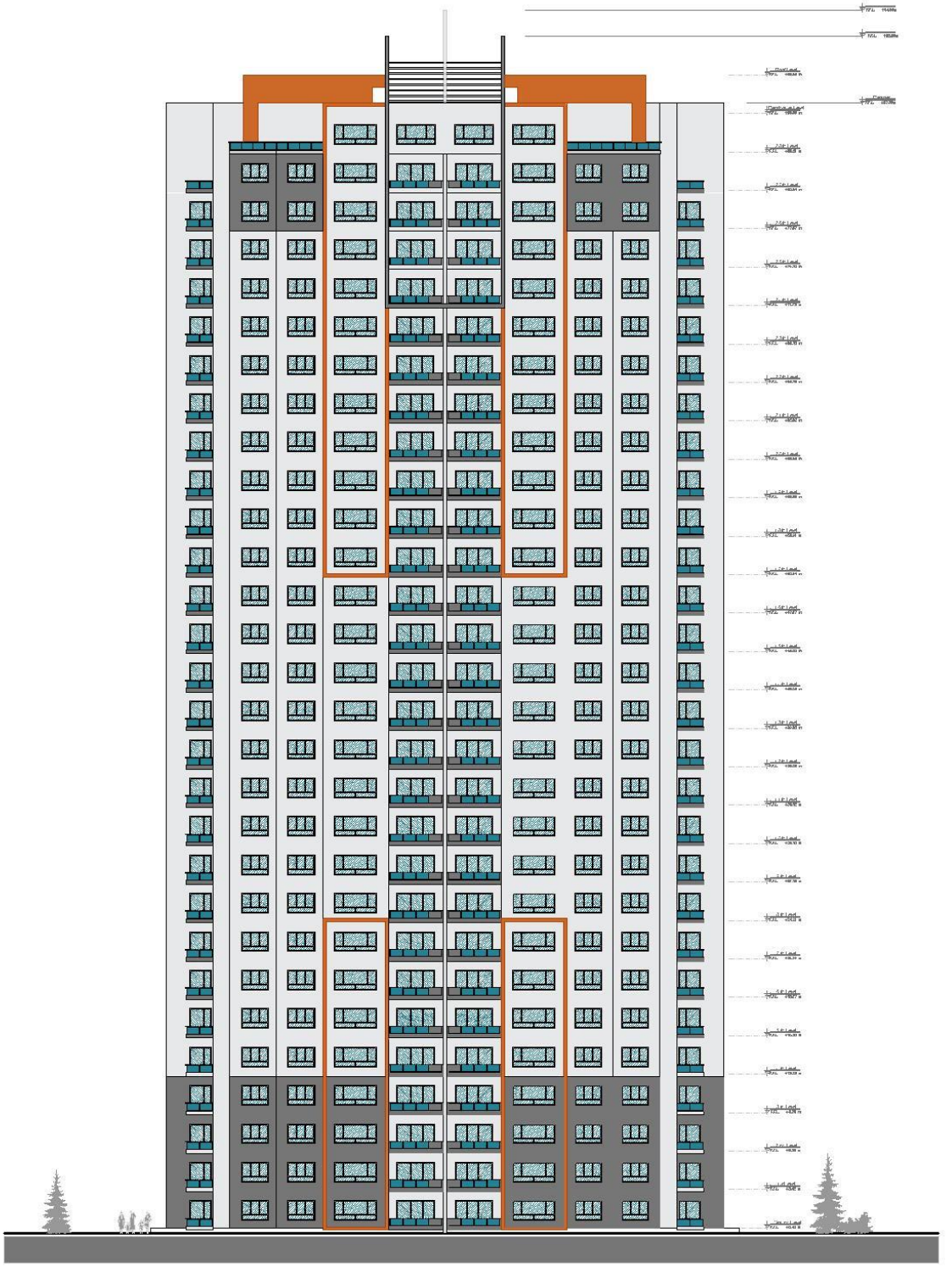
Lower Floor

Entrance
Corridor
Hot Kitchen
Kitchen + Sitting Room
Balcony
Bedroom-1
Bedroom -2
Balcony
Master Bedroom + Dressing
Maid Room
Turkish bath
Main Bathroom

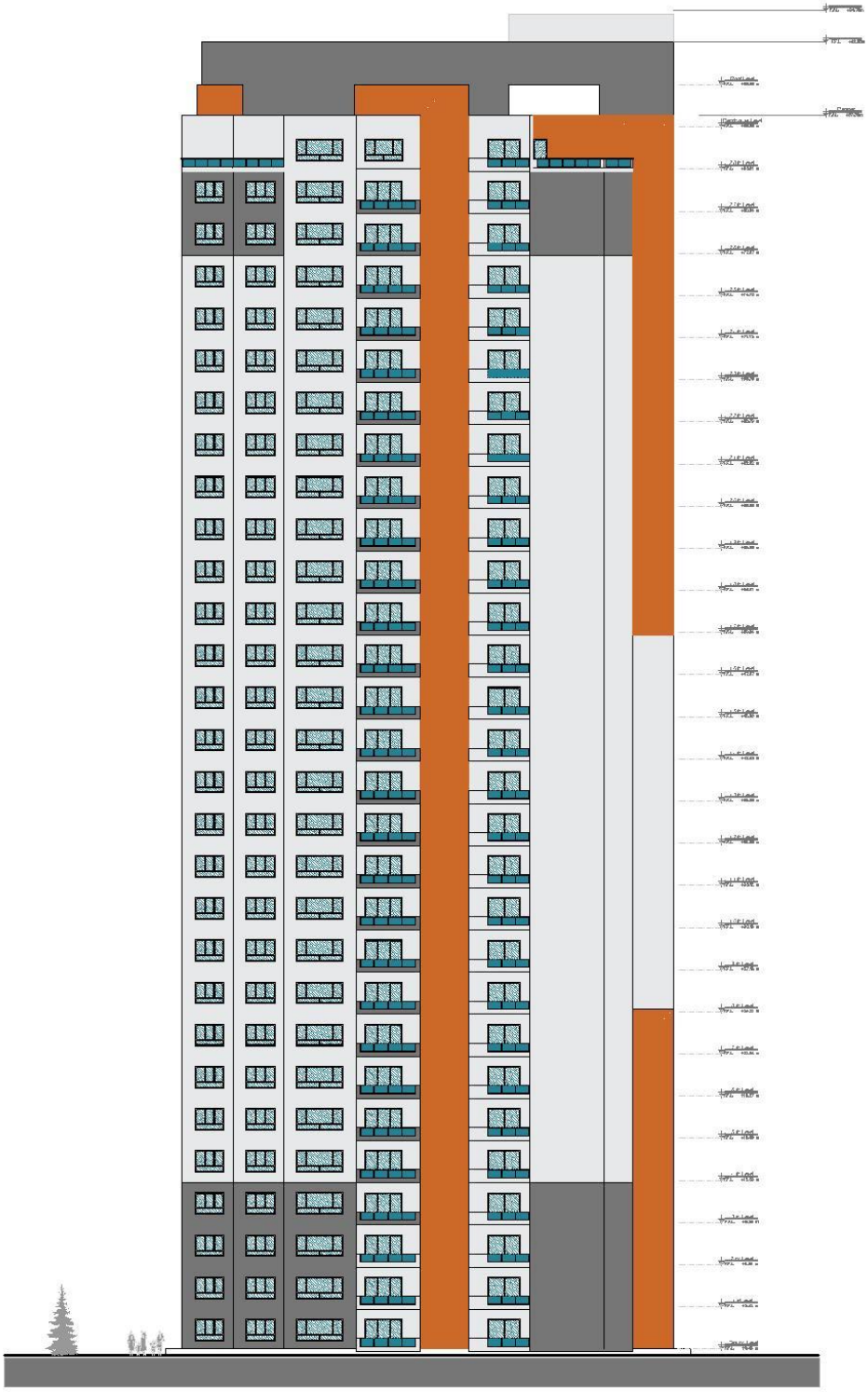
Upper Floor

Entrance
Corridor
Laundry
Kitchen + Living + Guest Room
Void
Terrace
Balcony
Master bedroom
Dressing
Maid Room
Main Bathroom + Jacuzzi

Elevations:

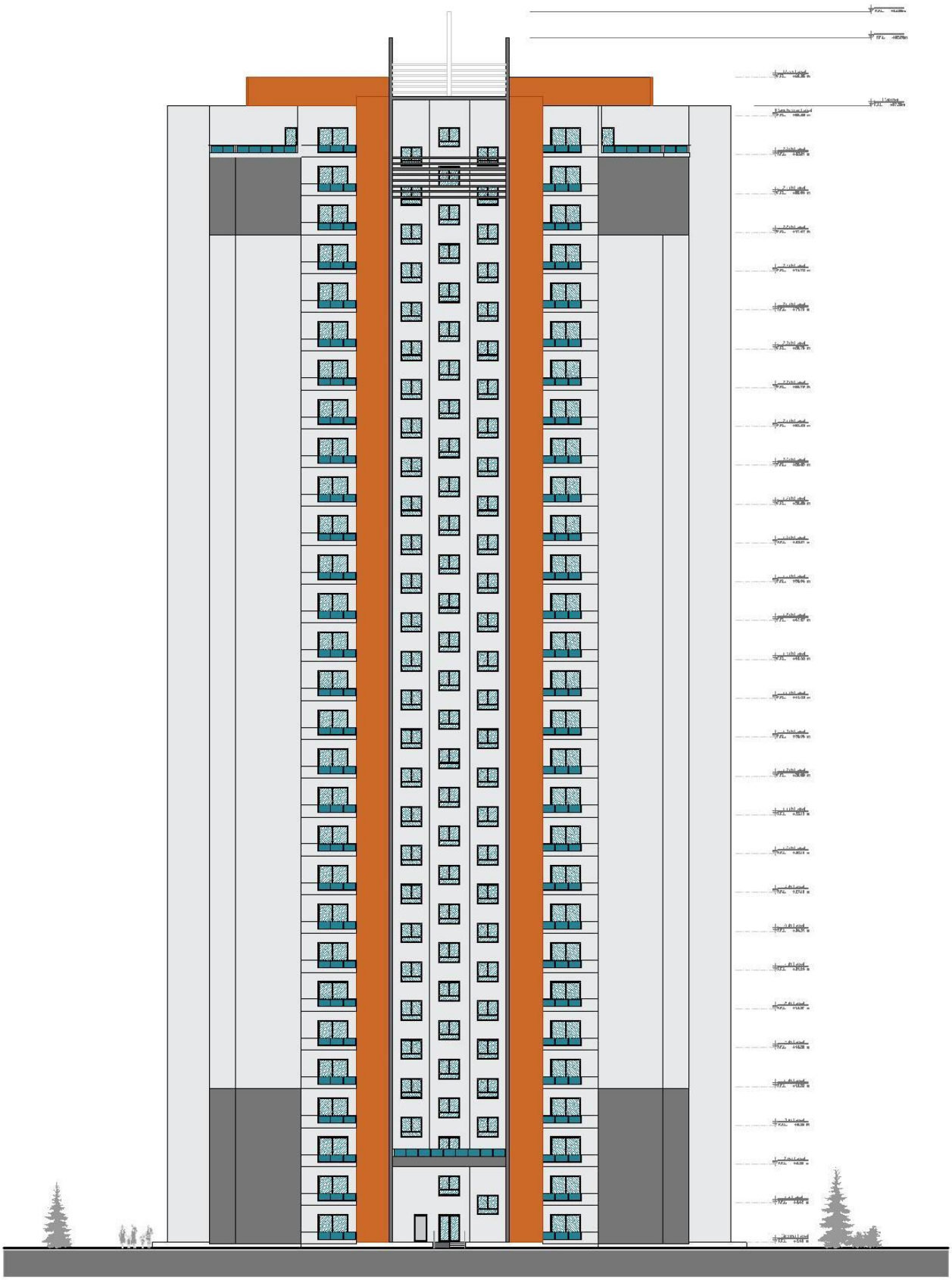


Elevation-1-



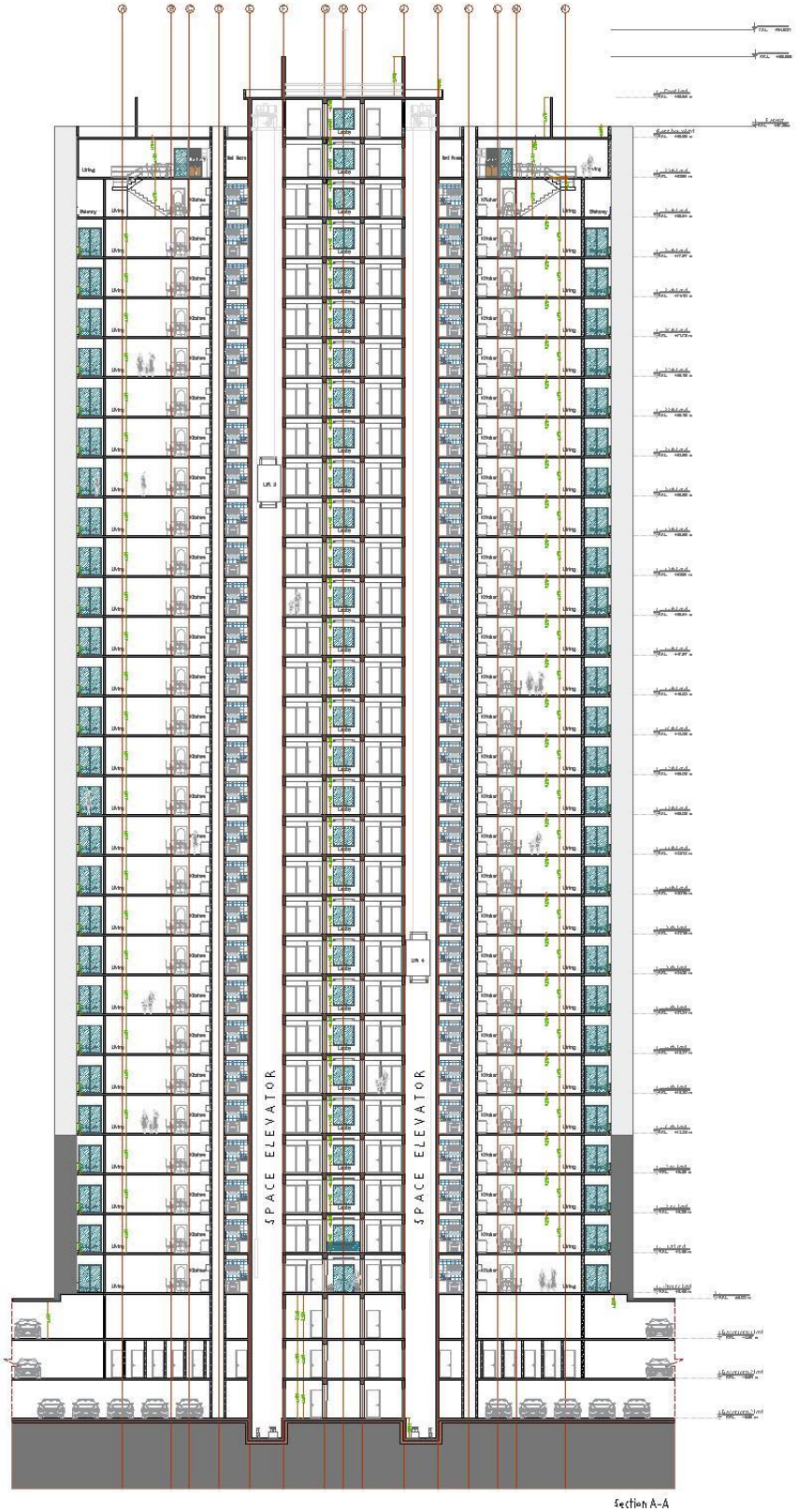
Elevation-4-

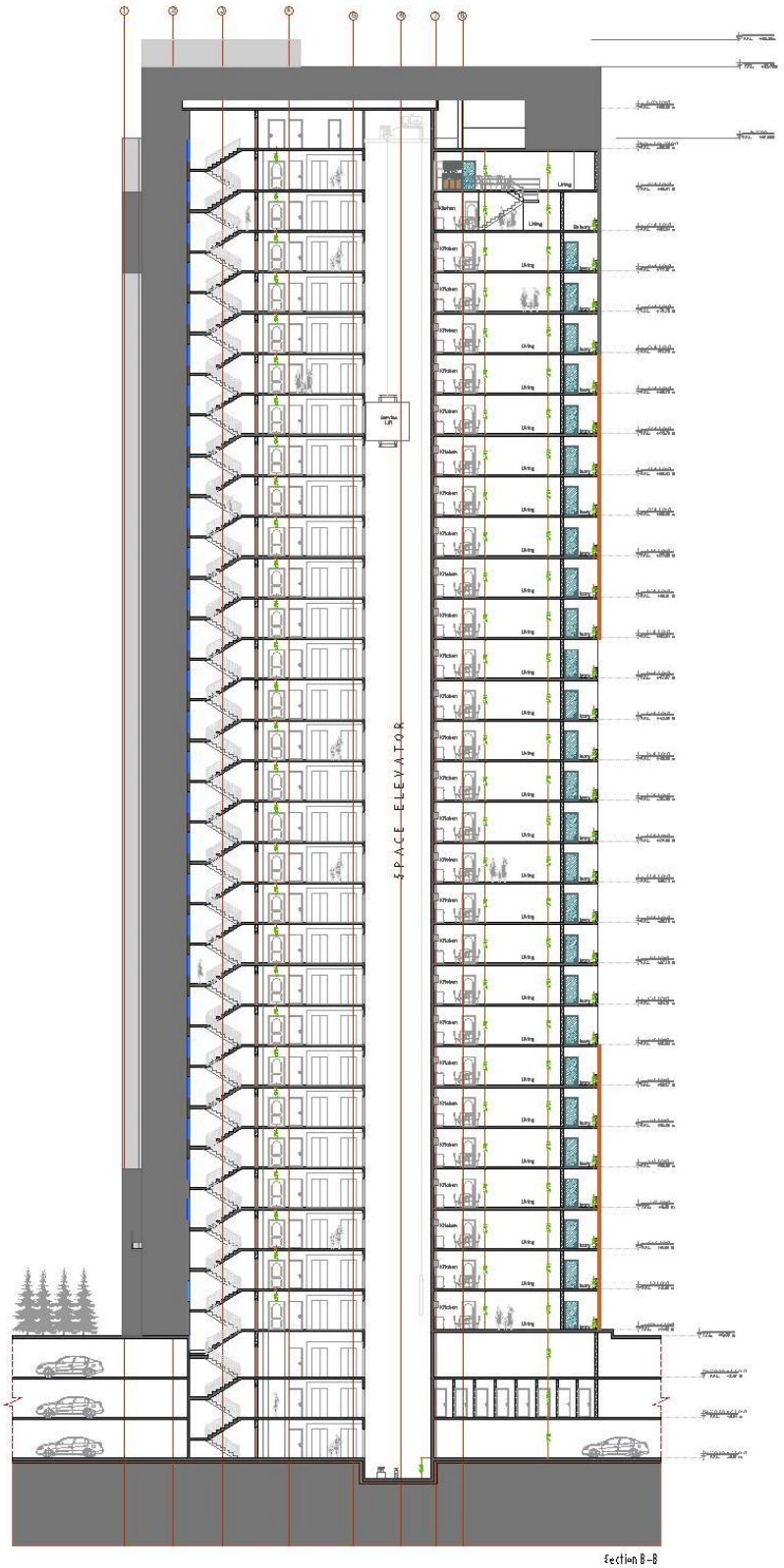
Elevation-2-



Elevation-3-

Sections:

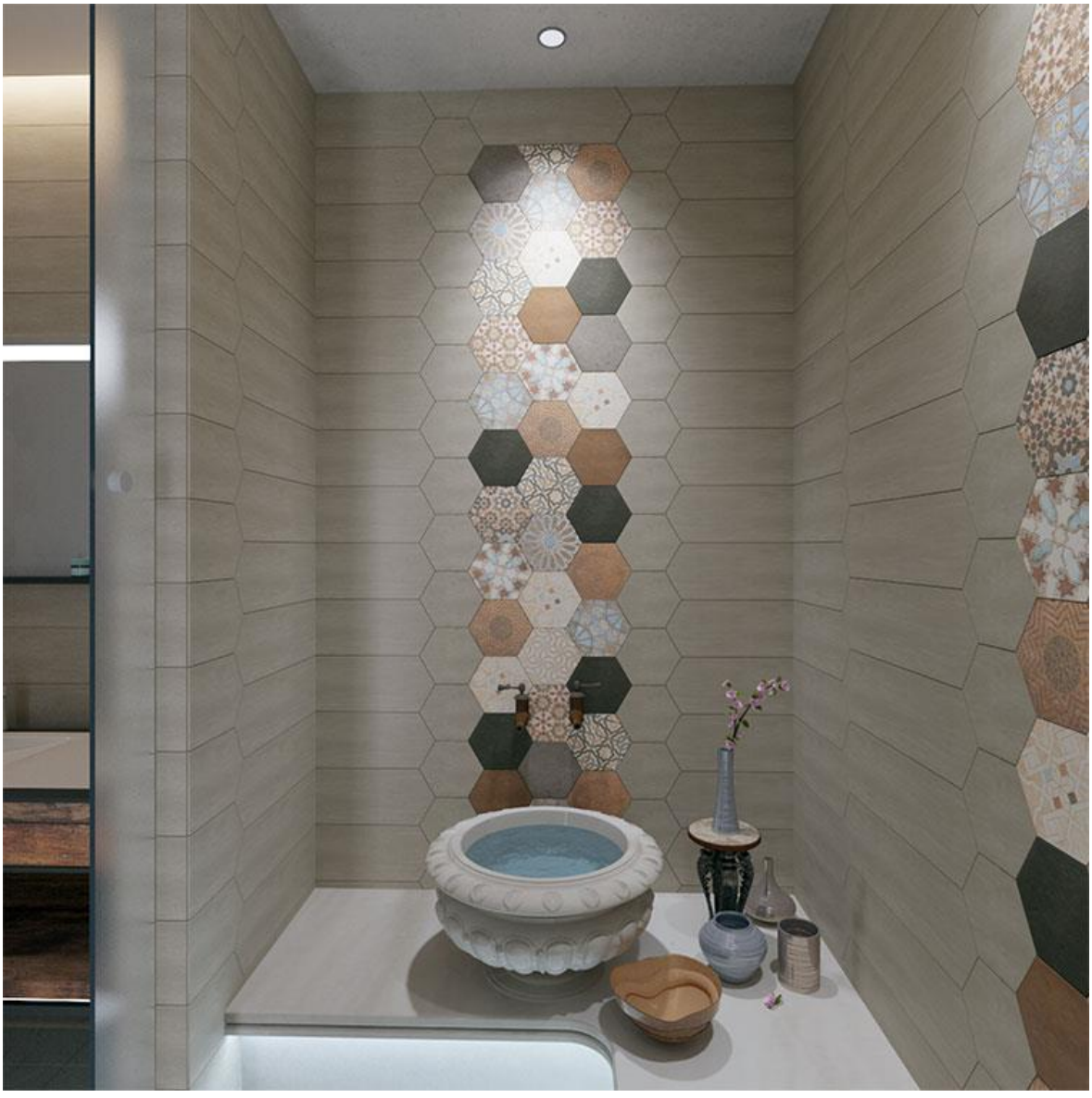



SPACE ELEVATOR
Section B-B

Extra Information about the Project:

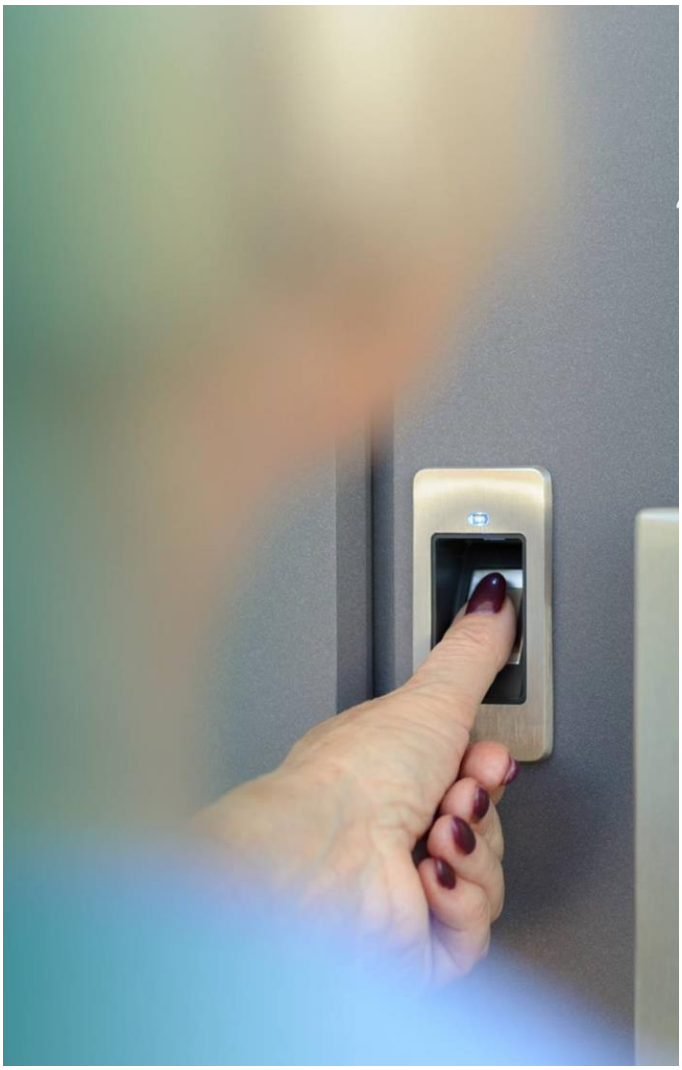
Some different options which are used for the first time in Kurdistan Region for residential projects such as:

1- Turkish Bath/ Each Flat



2- Heating System:

3- Finger Print Entrance Door:

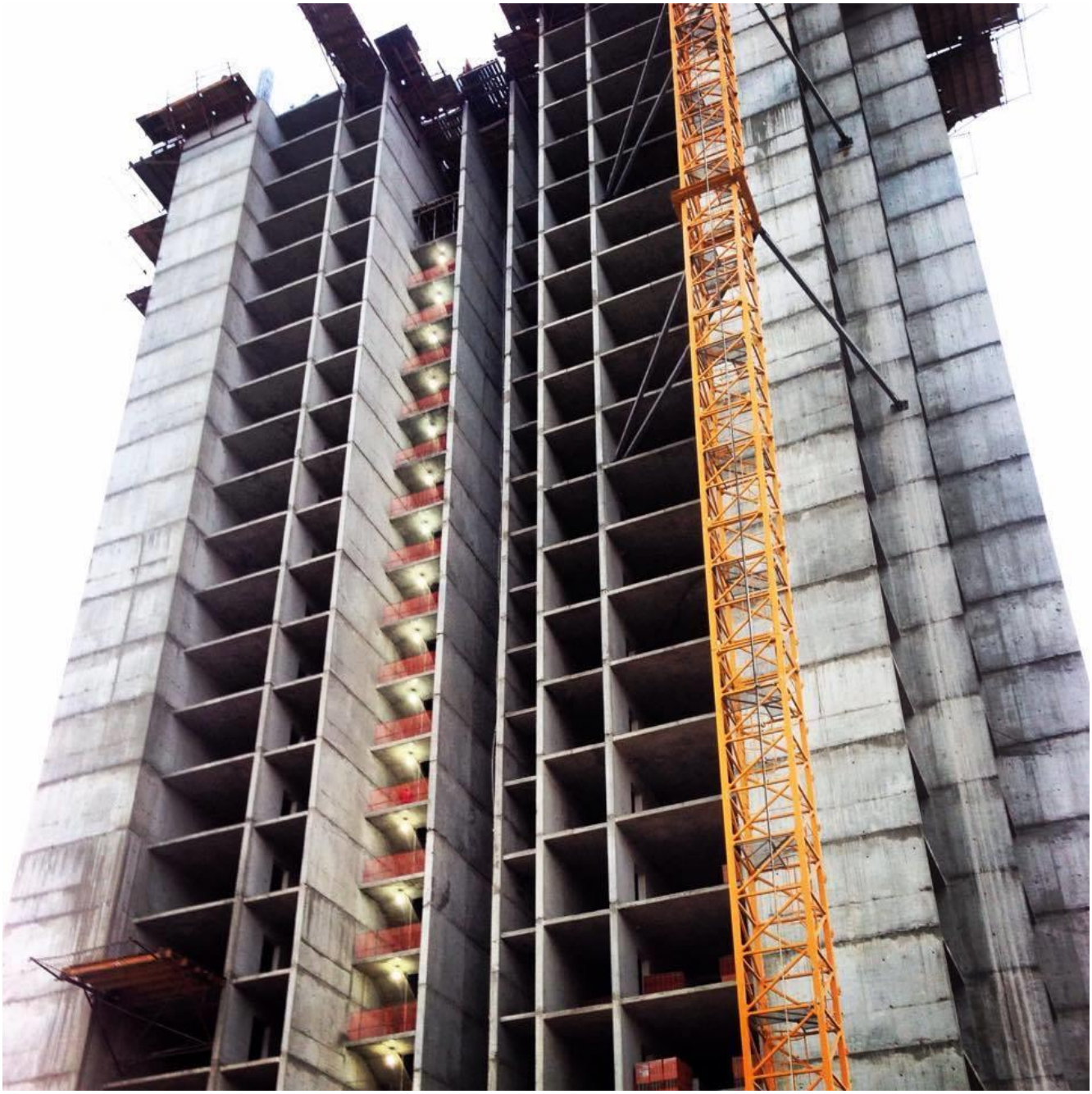


4- VRV air conditioning system:

5- Triple Glass Windows:

Structural information about the project:

- Tunnel Shuttering system used in the project as main structure of the buildings to prevent from the effects of earthquake.



- Under each building there are approximately 60 piles.

- The Foundation Thickness of each building is 2.5m.

- The structural system for the car parks is U-Boot system to obtain medium span for the car slots which are 15m length.