

3rd Year (2023-2024) | 2nd Semester
Architectural Design VI

Project Title: Mixed-Use (High Rise Residential with shopping center in Erbil)

It's proposed to create Residential building (*approximately 500 - 700 people*) with Shopping center. The idea is to design a Residential Complex that includes different kinds of Flats. The building must include a number of flats with **(1, 2, 3, 4 bedrooms and studio)**.

Important notes and general design requirements:

- Loading and service vehicle for the shops, vehicle must have access from secondary service roads.
- Garbage's is an important issue in the design and should be considered.
- Fire escape should be taken into consideration.
- Privacy issues should be considered for residential part.
- Entrance must be segregated between residential and commercial for safety & privacy issues.
- In the vertical buildings design; every flat needs a store in the basement.

Type of flats in the vertical buildings:

Flats will be designed for (*approximately 500 - 700 people*)

A: Studio type flats, area (35-40) m². For 1 person

Including: living area and dinning, Kitchen, Bath and sleeping area

B: (1+1 type) Flats with 1 bedroom for (2) persons.

Including: Living room and dining, Kitchen, Bath, 1 bedroom,

C: (2+1 Type) Flats with 2 bedrooms for (3-4) persons.

Including: Living room and dining, Kitchen, Bath, 2 bedrooms,

D: (3+1 type) Flats with 3 bedrooms for (5-6) persons.

Including: Living room and dining, Kitchen, Bath, 1 Master bedroom with Bath, 2 normal bedroom, bathroom,

E: *(4+1 type)-"ordinary type" Flats with 4 bedrooms for (7-8) persons.

Including: Living room and dining, Kitchen, Bath, 1 Master bedroom with Bath, 3 normal bedroom with a share bath, bathroom,

***(4+1 type) "Duplex type" Flats with 4 bedrooms for (7-8) persons.**

Area of spaces for Flats with (1, 2, 3 and 4 bedrooms):-

- 1- Master bedroom (16-18m²).
- 2- Bedroom for 1 bed (9m²).
- 3- Bedroom for 2 beds (13m²).
- 4- Bathroom (4.5m²).
- 5- W.C + lavabo (2m²).
- 6- Living rooms + dining area: (20, 25, 32, 40) m².
- 7- Kitchens (9, 10, 12, 14) m².

Flat Percentages:

The following percentages can be used:

- Studio type 15%
- 1+1 type 30%
- 2+1 type 30%
- 3+1 type 15%
- 4+1 type 10% (both types)

Important notes:

Residential part:

1. Students are free to choose either *Point* tower, *double load corridor* tower or *single load gallery* tower.
2. Several residential towers are used to accommodate 500 peoples. The distance between towers should be considered based on *Height/2* (h/2) and should not be less than 26 meters.
3. Parts of podium which face the main streets should be designed for shopping. The remaining areas in the back of site can be used for residential buildings, in which the towers will touch the ground without podium.
4. Natural lighting and ventilation are required for all residential spaces. (Only the bath can be ventilated using ducts) with exhaust fan.
5. It is better to not locate a bedroom beside the main corridors to the apartments.
6. You are required to use concrete structure.

Shopping part:

Main components for shopping Centre:

- Different types of shops (*Big shops, medium size shops, small shops*)
- Hypermarket
- Café(s)
- Food court for fast foods with services
- Restaurants
- Administration
- necessary vertical circulations (lifts, escalators,...etc) for shopping center floors.
- other entertainment activities & necessary services for shopping center...etc

1. Three type of circulation is noticeable: a-Costumers, b-Staff, c- Material access. Note: The entrance for costumers should not be crossed by staff and material access

2. Arrangement of furniture in the shops should be according to the commerce standards and in different ways.
3. Any shop with area greater than 300 meters has to have two entrances.
4. The ratio of area between show, Storage and working area depends on the type of materials and type of the work. Example: Flower shop (showing area %80 + Service and storage %20), Maintenance (Electronic) (showing area %20 + Service and repair %70 + storage %10), Clothing material (showing area %70 + Service and storage %30), Tailor (showing area %30 + Service and storage %70)

Note: All students are required to study standards of commerce and residential high-rise buildings.