RAMZI FAMILY HOUSE



Solid Form

Negative Parts





The process of moving the panel to the back of the shell

Outer hollow wall





Challenges, Criteria and Strategy

*population increase and the need for housing have caused the apartment to become the dominant form and should lead to appearance of a specific type of residential building. On the other hand, we face building sites with challenging conditions and dimensions, buildings which – conforming to already–set and improper regulations—must acquire lighting from one side and accommodate patios in their inner space. Yards will seldom be defined and the green space is kept to a minimum. In fact, apartment residency blocks two things: life in open spaces and facilities for collective life. Accordingly, one of the main axes of the design is presentation of a new pattern with the principle of overcoming this challenge.

*The other challenge is dichotomous, the dichotomy of the young generation (children) and parents, simplicity and complexity, stasis and dynamism, extroversion and introversion, inward and outward view, restriction or openness which, in Iran, we always face in design.

This dichotomy could be defined simultaneously rather than taking a decision in a binary situation. In this project, an attempt has been made to avoid a unilateral decision between the dichotomies and in a suspence-like situation, oscillate between the two sides of the breech. Therefore, the challenges of the project have been solved by a synthesis of dichotomous qualities.

*the other issue is the offering of solutions to construction issues; that as well as being compatible with the climate and visually attractive in comparison and competition with other buildings in the area, it would be economical. Accordingly, the material for façade and the ceiling have been procured from the excessive building stones. In addition to compatibility with the climate and other facades in the street- which are stone surfaces- it is affordable. *decreasing the consumption of energy.

Design Process

This project is located in the residential area of the city of Absard, Tehran Province, Iran with dimensions of 25 m * 1200 m which according to regulations is permitted to be built 60%+2. The building is neighbored on three sides and the southern side is the only front of the house which is visible from the alleyway.

The Northern side faces the mountain and due to the density of the area, is only viewable from the roof. The Southern Absard residential area lacks an aesthetically pleasant view either with respect to the buildings or the scenery. This building was designed for the residence of one family unit. The parents demanded the preservation of privacy while the children wanted an open design with open and semi-open areas.

Therefore, the story of the project design changed course from finding a solution for viewing the mountain and benefitting from its fresh air. With the objective of turning this restriction into an opportunity, the project was set off with a double redefinition by the senior and the young generation, the relation between inside and outside, form, openness and closure, introversion and extroversion etc. The design of the house was divided into two parts:

The second and third floor were designed for the married son and the first floor for the parents which provides the daily living space.

The roof and a terrace which are accessible by stairs with the height of half a floor. It is designed as an area for interaction and congregation between the two generations. Stairs with the height of one and a half floors is connected to the upper floor of the duplex of the young generation and connects with the hallway with an elevator.

This area is divided into an open and a semi-open space as according to regulations, construction is forbidden on the roof. The closed space on the roof is comprised of truss, elevator, air conditioning, storage room, bathroom and a kitchen. In this area, in addition to securing privacy and keeping the neighbors out of the line of sight, a view toward the Damavand Summit on the North and the sky to the South has been made available simultaneously. The created depletion on the roof has been extended to the Southern façade and in some places through the ground level down to the depth of 3-5m and has created a number of voids which have increased the light-giving and negative front and aids natural air-conditioning using shadows.

Two more yards, one large on the Southern side and the other small, have been designed at the posterior of the building.

Designing one tree on the ground, two cypress trees in the Southern yard (while preserving the two fruit trees on the site).

Evocation of a vertical garden on different latitudinal scales as a typology which solves the lifestyle of habitation in apartments which lacks the yard and green space.



Can a singular building effect a strategic change in the city's physiognomy? And buildings with the simplest secondary articulation effect an improvement on the cityscape's resolution?

The answer might be reached by homogenization of all the elements of the building or decreasing the construction materials in singular elements. Façade and ceiling have been built from excessive remainders after the cutting of stones with a single material and homogenously.

The façade of the building has been defined in terms of two shells with the spacing of 60cm. The window which is used for natural air-conditioning was placed on the second layer, the first layer being the façade stone. The 60cm spacing facilitates the cleaning of glasse.

*This porous crust, by casting shadow on the Southern glass façade, will significantly decrease energy consumption.

The outer crust has been made from stones with the dimensions of 10cm * 40cm and a geometrical pattern with the same dimensions with hollow depletions has been presented. The part which has an open cavity is mobile and flexible. It could be closed or if needed opened to provide better lighting. The whole could be taken away one part at a time, pushed backed on a railing and rolled up behind the wall. Therefore, in the open and closed state present us with two distinct facades.

* the crust, in a sense, redefines the border between introversion and extroversion. This crust is introverted during the day (in addition to providing view to the residents), blocks the view of the neighbors and at night, with the extension of artificial lighting to the cavities of the crust turns into a stone-like form and appears to be extroverted towards the neighboring units and augments the cityscape's luster at night.

