

Event high school - Melooran village

In the bed of a dry desert and under the shelter of high and low mountains, there is a village with simple and low expectations. In the shadow of the earthen colored buildings, girls in Baluchi colored clothes live in a dream of a school with facilities that may be used for urban girls.

Project concept

After dealing with any site, the first step is to answer this question: conflict or adaptation. The answer to this requires a detailed investigation of the project site, which determines whether we should go to the site war and encroach on the privacy of nature, or whether we should take a soft step on the project site and create a building that is based on the environment and compatible with the neighboring space. Basically, the best way to design any project is to adapt to the surrounding natural environment. Every building should touch the ground in a calm and light way. This statement contains a characteristic of the interaction between the building and its site, which is essential for the green process. A more explicit interpretation of this statement is that every building cannot be removed from the site it is built on, and the conditions before its creation Revived the building on the site. This type of connection with the site is seen in the traditional settlements of the Bedouin Baluchs; The lightness and peace among them in touching the ground was not only hidden in moving their house, but also included the materials they used and the possessions they carried with them (use of tents and capers). On the other hand, the rich and ancient culture of the Baloch people with Old customs and traditions were another influential factor in the design of the project. With the environmental and climate studies of the project, in accordance with the ancient and cultural principles and values of the region, the idea of sustainable and native architecture compatible with nature and climate was formed for the project. By examining the ancient climatic design in Sistan, the optimal use of wind energy has been the right answer to many needs of the people of this land. Climatic patterns, which are considered to be indicators of the texture of the region, have two major roles. The first role is to create natural blinds in the interior spaces. This was done by making wind deflectors called Kolak. Door is another architectural element to create blinds in the interior. Each window has 3 to 4 holes for the passage of wind. These openings direct the wind into the room from the north facing front. Providing the required humidity of indoor spaces is another role of the methods used in the hot days of the year. This possibility, which is provided by the shutters, by placing thorns behind the shutters and keeping them moist, creates a system called the thorn house. This method, while establishing air flow in the interior space, provides the humidity needed to achieve thermal comfort (water cooler function). The flat part was designed to the north and the arched part was designed to the south (the arch is to create a shadow inside). The desired wind is directed inside (ground floor) and the windows also direct the wind inside. The use of lattice valves on the north front directs the air and plays a significant role in reducing the ambient temperature in the hot seasons. These valves provide the possibility of adjusting the air in the room well. In this way, while passing light and air, depending on the needs and conditions, by blocking some openings or opening the blocked openings, the air flow can be regulated. Two methods are used to create evaporative cooling inside. 1- Ground floor: creating a garden pit and garden pit and planting plants near the wall of the area and the building with drip irrigation 2- First: creating a box in the roof with thorns and drip irrigation (similar to a water cooler) wind after passing through the plants and wet thorns It loses its heat and dust and clean and cool air enters the space. On the first floor, by creating vents in the false ceiling, this cool air is directed into the spaces. To exhaust the hot air inside, the south windows and vents created on the top of the south walls have been used. (Due to the lightness of the hot air, the exhaust valve is placed on the top of the wall (volumes are linear and compressed in the east and west direction) to reduce sunlight and create shadows of the volumes on each other in the summer and transfer the heat released from the materials at night. Cold desert and winter are placed in the adjacent volume. Also, in order to protect the building and the user and the internal spaces from desert storms and to create shade and the central courtyard and to maintain the view and view inside, the buildings are placed in two rows adjacent to the wall of the area, and the sports and game spaces are located between them. Also, the vegetation between the building and the wall of the area reduces the intensity of storms and disturbing winds. For the purpose of modular design, the project land was divided into 10 x 10 meter grids, each of the building modules is located in one of these grids in an east-west longitudinal axis, and in the eastern part of the project, due to the wider site of these modules, They have moved to the wall of the area. Due to the location of the site in the desert bed and surrounding low mountain ranges, in order to induce the form and sense of mountain movement, the modules start from the side of the ground with a low height and

reach their highest height in the middle. When we look at the project from a distance, it seems as if the slopes of the surrounding mountains have extended and the project and the substrate have become one. The most important factor in the hot and dry climate is the creation of shading spaces. This has been created in the yard by installing a tent canopy. Also, in order to increase the flexibility of the space and expand the open space of the prayer room, workshop and restaurant in T Hekaf is separated from the surroundings by bamboo partitions. This creates a space as a covered courtyard in very hot seasons (pilot and shade) for group gatherings and activities. In addition to the secondary access to the first floor, the stairs of the western wall provide a space for children to sit during entertainment and watch special events in the cool seasons of the year and in the evenings, and also in the lower part, a space for group activities such as theater and music. and local dances have been created. This terrace has created a space for teachers to sit on the first floor. Also, in case of an increase in population, the adjacent workshop space, which is separated from this part by a partition, can also be used. The project is designed in two floors. The main entrance is considered on the north side of the land, and the service and parking entrance is on the east, this prevents the functional interference of the spaces. The ground floor includes educational, service and utility use and parking, and the first floor includes cultural and administrative spaces in addition to education. In front of AX, there is a staircase supervisor and a lift for the disabled to access the first floor, and next to it, a space for the temporary establishment of officials when necessary, and a fountain and plenty of plants to cool the environment under the stairs have been designed. On the south side, the learning center and the prayer hall are separated from the courtyard in the east by movable partitions. The openness of the space on both sides creates natural blinds and cools the space. The bathroom space, drinking water, facilities and parking are located in the vicinity of this space, the proximity of the service to the prayer room makes it possible to use it easily for ablution. On the north side of the first floor of the classrooms and on the southeast side of the workshop and laboratory, and between these two uses, on the southwest side, there is an office space that can be easily accessed from both sides. Next to the teachers' room, there is a green and open terrace for teachers to rest in the west.

Access

- The main access for students and parents is from the north side. The waiting area for parents, servants and school guards is located next to this entrance.
- The access of professors, services, personnel, service is considered from the eastern part. The parking lot is located next to this entrance.
- The main access to the classes and workshops on the first floor is from the central staircase on the south side along with the lift for disabled people
- Access to the meeting hall and library space through the northern ramp (provision of a ramp for easier transfer of the population, supplies and disabled people)
- Secondary access to the first floor classrooms through the west staircase

Materials

Hardening of cement blocks, facade of micro-cement, thinning of plaster and white micro-cement, sandblasting of the roof, sand yard floor, brick classroom floor, wooden door and window, wooden furniture, metal frame, brick roof

Innovation and climate solutions

- 1- Compact volumes with high height to create shade and place the building facing the north wind
- 2- Tent and wooden shade, Arched roof
- 3- Gravel on the roof, cement block, plaster and brick, light-colored joinery (sun reflection)
- 4- Air intake vents (vents), heat exchangers and evaporative coolers
- 6- wooden doors and windows
- 7- court yard and many plants on the north and south front
- 8- Using the corridor on the south front of the building and in front of the classrooms not only as a boundary between open and closed space, but also effective in creating suitable climatic conditions and a comfort point in the building.