



INVITATION TO THE ABANDONING PLACE

DIVERSITY, VARIABILITY, TRANSFORMABILITY AND COMPATIBILITY OF HOUSING UNITS IN IZMIT



Location and risks

Our area of study, which is a seaport established on a hillside in northeast of Turkey, is an industrial region being next to a metropolitan city named Istanbul. Its urban layers damaged due to the countless earthquakes consist of Hellenic, Roman, Byzantine and Turkish civilizations. Structures remain standing the most belong to the Ottoman Period. However, many of those are known to have lost their unique characteristics because of modifications made by users and some have been demolished.

Izmit historical urban site is connected with the street where significant commerce processes are held. Multi-storey structuring on this street have separated both the visual and physical ties of historical settlements of Izmit with city center. To sum up;



The city of Izmit has the risk of earthquake.



Istanbul, with all of its aggressiveness and

invasiveness, has come very close to Izmit's borders being a calm city.

Our area of study is in historical urban site.



The buildings on the historical urban site belong to poor people and they are uncared, they face to deperdition.

These buildings which are located in the architectural site being very close to city center and under



the threat of being demolished leaves their places to high-rise buildings giving importance to the needs of the place and the user.



Historical urban site has started to lose its visual tie with the city center despite the grade in the area because of the high rise buildings inside and the in the neighborhood.

People living in the region are afraid of being disconnected from their residential areas claiming that this is urban transformation.

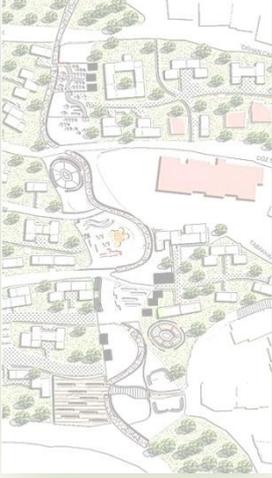
The historical area open to the gulf scene in a region where the grade rises, is uncared because of the tangible problems of the users, it is still an attractive place thanks to nice scenery, being away from the concrete jungle and environmental noise, sustained neighborhood relations, cliff-hanging different perspectives and the stairs connecting the streets. However, the grade of the area and the irregular placement of the houses have caused accessibility and use problems in the streets.

How to invite to the place to be abandoned

Surveys have been carried out with the people of the region to learn the social and cultural background of our area of study. The residents of the area in the low income group are at the age of around 55-60. It was pointed out during the interviews that the youth don't prefer to live in this area. It was stated that all the residents of the neighborhood are pleased to live there, like their neighbors, gardens, scenery, easy reach to the city center and don't want to leave the area and won't adopt the type of living in the block of flats. Additionally, they have stated that they are uncomfortable with the insufficiency of the social areas to socialize with their neighbors, and request a solution for this.

Since the disconnection of the local community from the area because of urban transformation, social area insufficiencies will cause the area to be abandoned and make the area demolish itself, this means the biggest risk in our opinion.

The most important concept that dominates us in our design is the abandonment. As a solution for this problem, it was studied in our design to allow the area to be a place attracting the people.



While making design for this area, we wanted to preserve the garden of them, the idea of sustaining the neighborhood relations and field of view richness which are liked by the users. We have designed a social axis, cafes, shops, workshops with stairs designed to be perpendicular to the grade and with green areas so as to make the area attract other people as contrary to the concept of abandonment which we describe as the risk. This parade will create a working area for the local people and also allow them to socialize. Thereby, our area will once again be an attraction center.

Harmonic combination for different user among the living units

We have fictionalized a living scenario in which the current users who don't want to leave the area and the low income users with different ages and different life styles who may want to come to that area, can socially support each other. By bringing the different life units to be used by different user types, we have paid attention that they have their own private areas as well as



creating opportunity to let them improve their social relations. It was hoped that old, student, family, unemployed, and homeless potential users will support each other both tangibly and unearthly. The idea of giving the homeless users an area of living and also a mutual yard was adopted but it was designed that this structure community that they live together should establish integrity among the other user masses. It was also designed that all the user masses in our designed social axis should make use of the commercial areas and the homeless users should benefit from their own structure communities thereby to contribute to their tangible conditions.

Reasons of choosing structural system

Since the physical and social needs of different foreseen users are different than each other, all these would be required to be reflected on the type, size of the buildings and facility organizations. This concern has directed us to earthquake resistant, fast-production, economical, the ones having different combinations, environmentally friendly, flexible, lightweight, isolated

ecologic structures. For meeting these requirements, we preferred the prefabricated construction system. Because Izmit is an industrial zone, there is no problem in production and transport of this system.

User satisfaction by the participation on decision taking

 Since the system is modular, it can be produced in the demanded dimension. By producing the combining alternatives of the selected  three main modules, it was aimed to respond to different user preferences. One  module was determined to cover only the bathroom and kitchen areas, and other  two modules were designed in a different size for the living and sleeping areas. For the users who will not read the architectural plans and have difficulty in deciding, each of the produced units other than the bathroom and kitchen units shall be presented to the opinions of the potential users of the area before the internal separations are made and with a few alternative separation suggestions through the models. So, area organization conforming to the needs of the users will be provided with lightweight panels. Our study performed will be in line with the changing needs of the users thanks to adding-discharge, re-separation features.

Benefits of prefabricated systems

It will be used in every season and on every ground thanks to heat isolation inside the prefabricated structure system. The isolation will be 6 cm thickness in interior and outer walls and applied as isolated with 16 density, separative walls reinforced with galvanized steel carcass specially shaped with cement based particle board are used in the internal parts. Screwed system was preferred for the joint elements, the bleeding that may occur as a result of the temperature changes is prevented thanks to specially produced U and H profiles. By using specially twisted stainless galvanized sheet for the girders and columns in the carrier system of the building and using “C” slice column and putting a girder in every 100 cm increasing the wind and earthquake resistance of the building was ensured. 10x1000x3000mm sized carcass Wall panels on the facades were connected to each other by using “H” profile.

Different climate, different place

Exterior surface coating in our project has been preferred as carbon reinforced EPS since it is environmentally friendly and economic. Inclined roof system was chosen in order that the rain water is collected to use in the garden and cleaning works and solar batteries are placed to meet a significant energy requirement of the houses.

This can be repeated and reproduced in the demanded area because it doesn't require foundation, can be installed on lean concrete put on the ground for one storey structures and has the possibility of being installed on raft foundation put on the ground for the multi-storey structures and has the feature of being installable at anywhere.

For the use of our units in different climate regions, we recommend that green roof should be used instead of roof for the no snow areas, moreover North and West facades should be planted in the cold and hot regions respectively.

Application Process

The structure system the pre-production of which is made in the factory provides perfect and fast production and the possibility of fast installation. The standardization in the structure system offers stability in quality and cost effectiveness. In the system whose time of installation takes about 3 weeks, unit cost is calculated as 500 m²/TL. Exchange rate EUR 1 - TL 2.8031 It is equal to 178 Euro for per square meter.

  Our minimum size unit is 45 m². Its cost is 8000 Euro

Our medium size unit is 77 m². Its cost is 13000 Euro

