

Structural Features and Conservation Problems of Traditional Adobe Houses in Erimli Village, Diyarbakır



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ABSTRACT

Since the global warming problem caused by high energy consumption in the production and use of building materials in the construction industry has become a serious threat all over the world, the search for renewable energy sources, use of ecological materials and especially the research on earthen architecture have gained priority in recent years. Adobe, used as a building material in many parts of the world and produced from soil, is a cheap, environmentally friendly, easily supplied, and shaped material.

One of the regional examples of adobe houses, which are seen in rural settlements in Turkey, especially in Anatolia, that have survived and continue to be used today, is the earthen houses in Erimli village, Diyarbakır. Soil is the main building material of many buildings in Erimli village, with its old name **Simaki**, located in Sur district of Diyarbakır province. It has been determined that climatic conditions, geographical location, topography, local material opportunities, social and cultural structure; traditions and customs, social life, production and consumption styles and beliefs shape the earthen architecture in Erimli village. In addition to low-rise, flat-roofed, prismatic looking adobe houses, structures such as adobe garden walls surrounding them, barn, shed, hayloft, warehouse, pigeon houses (boranhane) have also been effective in the forming of Erimli village in the process.

In this study, it is aimed to define the architectural and structural features of the adobe houses in Erimli village, where life has been going on for about 100 years in Diyarbakır and to determine the usage and conservation problems. For this purpose, adobe houses in Erimli village were examined on-site and documentation studies were carried out. It has been observed that these houses faced many physical and structural problems over time and some of them were demolished and rebuilt as reinforced concrete. In order to ensure the continuity of adobe structures today, it is necessary to adapt them to contemporary conditions, to strengthen them in terms of materials and structural features and to systematically maintain and repair them. Within the scope of the paper, findings of earthen architecture in Erimli village, Diyarbakır, usage and conservation problems will be shared to preserve the original earthen architecture, whose numbers are gradually decreasing and to ensure that it is passed on to future generations.

Key words: earthen architecture, adobe houses, sustainability, construction, conservation