

Half-Timbered - Adobe Material, Sustainability



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ABSTRACT

All creatures have searched shelter for themselves to maintain lives and they have created own shelters inspired by nature, both imitation and materials that found in environment. People who instinctively build shelters using natural materials such as stone, soil, sand, clay, wood; they have also discovered many different construction and construction techniques depending on mobility of the world, change of human life, life expectancy, development of technology and new teachings. In this context, one of the traditional construction techniques and teachings of people from the past and half-timbered (hımış yapı) which is produced with adobe material are also considered as an example. Adobe material that is produced from the soil, which is exist in origin of half-timbered tradition with its features originating from its natural structure; the fact that, it has a nature-friendly, sustainable, and suitable for climate condition behaviour has led to the preference of adobe material in production of half-timbered structures. Half-timbered heritage from the past is decreasing because changing livings, environmental conditions, and supply demand relations; parallel with this situation because of the slowing down of transmission of tradition from generation to generation, heritage of half-timbered construction tends to be lost. However, for the future of the world, in 21st century efforts to bring concept of sustainability to forefront and increase awareness on sustainability have contributed to bringing the half-timbered construction tradition back to the agenda and to the emergence of contemporary examples. The material, material properties and construction techniques should be supported by technological developments and transferred it to future generations to maintain the tradition of half-timbered construction produced by adobe. Allowing material for serialization of production, increasing the resistance of the material to environmental conditions will contribute to continuity of buildings and the building tradition. The study mainly dealt with half-timbered and its origin of the adobe material in half-timbered construction production, afterwards it mentioned construction technique of structures, sustainability and relationship with environment and protection methods, then it aimed to reveal positive effects of adobe material on human health and life. Paper recognizes to existence of brick, stone, twig and adobe, adobe fillings in the half-timbered construction tradition, and focuses on adobe filling and half-timbered materials. The existence and characteristics of the half-timbered tradition in different regions of the world are also within the scope of the paper. Interpretation of analysis, it is provided that characteristic of the traditional half-timbered concept is more understandable and acceptable.

Keywords: half-timbered, adobe, sustainability, environment, traditional and contemporary