Principles and concepts of sustainable architecture in designing residential complexes.

Abdi B, Shahri K, KhoshNiyat S, Bairamzadeh H, RezaeiShahabi R.


Abstract

Several decades have passed from the introduction of sustainable architecture in the
architecture area and international forums have proposed many strategies for its development. The ultimate goal of the sustainable design is to find effective and useful psychological, physical, quantitative and qualitative solutions in order to construct buildings for users. There are several possibilities and facilities to achieve such a seemingly difficult goal. The three principles of the sustainable design result the preservation and the survival of resources, designing according to the life cycle and human-oriented designing, providing the wide awareness of environmental consequences related to the architecture. The existing strategies in the hearth of each of these principles guide us to the more terms and criteria. These strategies are investigated to foster the understanding of this issue that how a building interacts with the global, local and internal environments. The principles of the sustainability of the residential complexes from the social dimensions including the justice and aesthetics, comfort, security and children's development, social identity and other similar issues were investigated. The result was as follows: first factor, the physical comfort inside the house; second factor, extendibility of the open and multipurpose spaces for the children; third factor, social identity; forth factor, social order. This paper briefly tried to introduce the general methods to apply the sustainable designing in the architecture that are guidelines for the further research and investigations.

**Keywords:** Residential Complexes, Social Sustainability, Sustainable Architecture, Sustainable Designing, Nature, Climate.