Sustainable Housing in Steel: Prospects for Future World of Developing Countries

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Abstract: Developing countries are having significant additions to existing population of urban areas with loads of migrants from rural areas. There is a tremendous need to provide accommodation facility to cater to rapidly growing urban population. This leads to unprecedented growth in urban areas since the temporary shelters are constructed with any available material. Architecture in a broader sense serves to humanity in terms of making life of people happy and comfortable by providing comfortable shelters. It is also the need of the time for an architect to be extremely sensitive towards nature by providing design solution of human shelters with minimum impact on the environment. The sensitive approach towards designing of housing units and provision of comfortable and affordable housing units should go hand in hand for future growth of developing countries. Steel has proved itself a versatile material in terms of strength, uniformity and ease of operation and many such other advantages. Steel can be used as the most promising material for modern construction practices. The current research paper focuses on how effectively steel can be used probably in combination with other construction material to achieve the mentioned objectives for sustainable housing. The research available on sustainable housing in steel is studied along with few case studies of buildings with the efficient use of steel providing a solution with affordability and minimum harm to the environment. The research will conclude the effective solutions exploring possibilities of use of steel for sustainable housing units. The researcher shows how the use of steel in combination with other materials for human shelters can promote sustainable housing for community living which is the need of the time.

Keywords: community living, steel, sustainable housing, urban area

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