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# Planning of Two Storey Container House

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**ABSTRACT:** Container housing emerged as a contemporary and sustainable solution to the growing challenges of urbanization and housing shortage. Economic consideration plays a crucial role in the availability. This is a cost-effective aspects of container construction exploring how the use of standardized modules and prefabricated components can contribute to affordability and efficient construction timelines. The planning can done through AutoCAD.

**KEYWORDS:** Urbanization, prefabricated, contemporary

## I. INTRODUCTION

Shipping Containers are used for cargo, transportation of goods and for next transportation either by a new container or reused old container, generally new containers are used. old one become waste (no reuse) so you can use it as a building material they are steel boxes. Container Houses are buildings erected with these containers. Usually, length are 6 or 12 meters 2.6-meter height and 2.6 meter wide and also varying sizes are available. Shipping containers can carry the maximum gross weight of 30450 Kg/67200 lbs for general purpose containers and up to 45000 Kg/99207 lbs. for fast tracks.

Container homes are emerged as an alternative to traditional homes. These homes promote recycling by repurposing shipping containers. And affordable option, there construction require fewer building materials and labor compared to conventional homes. Container homes are slowly becoming a new housing choice, as they are cost effective. moreover with proper maintenance, these shipping container houses can last decades.

## II. RELATED WORK

Malcolm McLean, an American entrepreneur, pioneered the concept of containerized shipping in 1956. He recognized the need for a more efficient method to transport goods from trucks to ships, leading him to develop the steel shipping container. McLean's innovation drastically reduced the cost of loading and unloading freight and laid the foundation for today's global shipping industry.

The history of container houses, also known as shipping container homes, dates back to the mid-20th century. The concept emerged as a creative response to the surplus of shipping containers that became available after the rise of containerization in the shipping industry. In the 1960s and 1970s, there were scattered experiments with using containers for housing, mainly driven by the availability of surplus containers. These early projects were often small-scale and experimental. Interest in container housing grew during the 1980s and 1990s, driven by environmental concerns, affordability, and the desire for innovative architecture. Container houses started gaining mainstream recognition in the early 2000s. Several high-profile projects showcased the potential of container architecture, including the Container City in London and the Redondo Beach House in California.

Container houses have become increasingly popular around the world, appealing to homeowners, architects, and sustainability advocates. They are used for diverse purposes, including residential homes, offices, art studios, and temporary shelters.

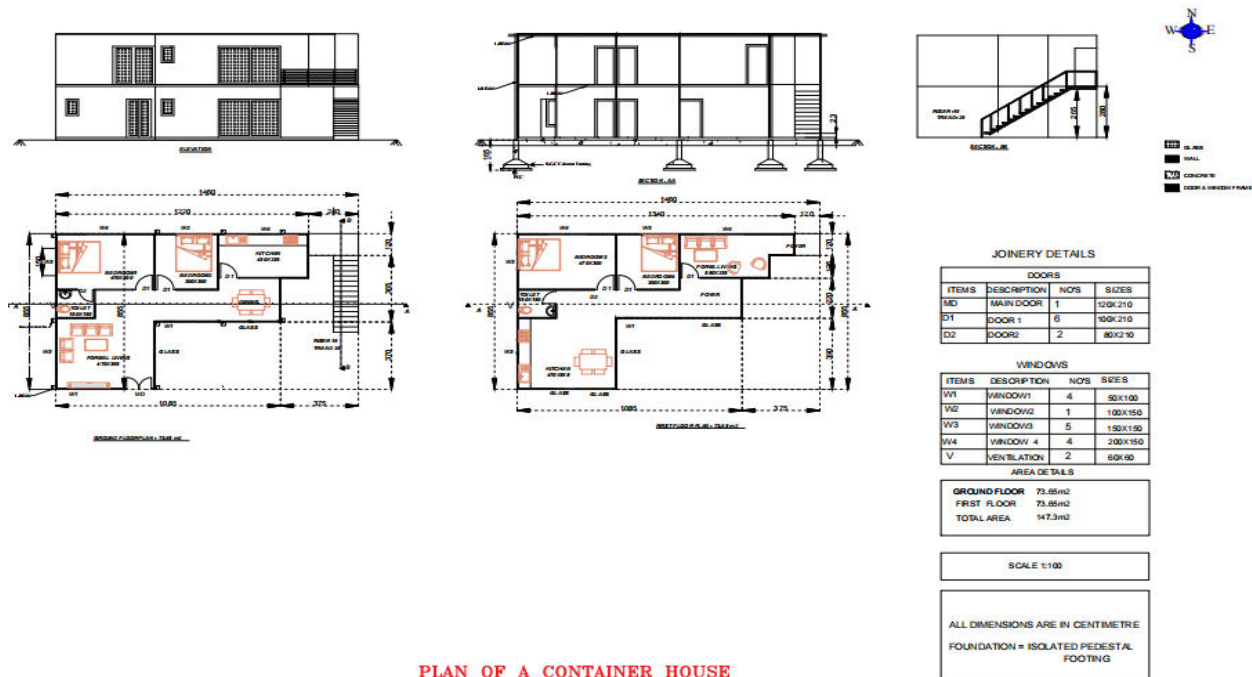
## III. METHODOLOGY

We have selected five 40ft container which were cut into different size and made the plan. The plan is prepared using AutoCAD. AutoCAD drawing includes structural planning which consist of rooms, staircase, kitchen, living room.

Drawing includes plan of First floor and Second floor, elevation and sectional plan. Size and dimension of doors and windows are also mentioned in the drawing

#### IV. EXPERIMENTAL RESULTS

The following is the plan, elevation and sectional view Container House



PLAN OF A CONTAINER HOUSE

Six full Shipping containers are used which is made according to the proposed plan

#### V. CONCLUSION

Container home, also known as shipping container house is usually utilized as a primary building blocks for residential spaces. Container is originally designed for transporting goods across the globe but we can usefully convert it into a steel residential building. We have designed a two-storey building using five 40ft containers. Container Homes are more sustainable and environment friendly. We have successfully designed and Container House using AutoCAD.

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