CENTRAL ASIAN JOURNAL OF ARTS AND DESIGN

VOLUME: 3 ISSUE: 2 | 2022



Available online at www.cajad.centralasianstudies.org

CENTRAL ASIAN JOURNAL OF ARTS AND DESIGN

Journal homepage: http://cajad.centralasianstudies.org/index.php/CAJAD



Innovative Technical Solutions in the Design of Modulle Residential Buildings

Xusnidinova Nozima Ashurovna

2nd Year Master's Degree Student at Bukhara Institute of Engineering Technology

Sh. R. Mirzayev PhD

Annotation

Modular Buildings designs and manufactures advanced modular buildings for a selection of markets including education, healthcare, and commercial. Modular buildings provide the fastest space construction solutions for temporary and permanent needs, Modular buildings, worker camps in remote locations. Modular Buildings modular construction method creates significant cost savings and quickly produces buildings in a fraction of the time compared to conventional construction. Get affordable, good quality mobile office buildings and modular buildings for sale with quick delivery and easy installation. In this article discusses about Innovative technical solutions in the design of modular residential buildings.

ARTICLE INFO

Article history:
Received 01Jan 2022
Received in revised form 27 Jan
Accepted 29 Jan 2022
Available online 2 Feb 2022

Keywords: modular buildings, design, modulle, residential buildings, innovation, technical.

Modular, literally, means "made up of parts." Modular buildings, which are completed by joining the parts and can be re-divided as needed, appear in the building sector in the form of prefabs and containers. While prefabricated structures and container structures are ready by combining the parts that compose them, at the same time, they can be shaped according to user requests thanks to their re-removable parts. From this point of view, modular buildings, which form an example of a very useful and functional structure, of course have many advantages arising from this feature. How are the parts of modular buildings produced? It is produced in a factory environment.

In the factory environment, the modular components, which are produced by minimizing the margin of error caused by the human factor, are transported to the construction site for assembly. These parts, which are produced in line with the demands of the user, are combined in line with the plan prepared in the field and finally, modular building construction show up. Custom modular buildings, which are realized in a much more practical way than conventional construction processes, save both time and cost. It can be used for temporary solutions such as work camps at work sites or for temporary organizations in certain organizations, and permanent modular office buildings can be produced for many permanent living spaces such as security cabins or different business areas.

E-mail address: editor@centralasianstudies.org (ISSN: 2660-6844). Hosting by Central Asian Studies. All rights reserved..

In our age, where speed gains importance in every field, it is a great advantage for a structure to be portable. Modular buildings can be easily moved from one place to another. If needed, they can be transported to another area in a practical way.

Since the parts of the modular buildings are brought to the field ready for assembly, the construction phase is completed in a much shorter time than the classical construction processes. This prevents both polluting the environment in an uncontrolled manner, preventing noise pollution, and the process is ended without waste of material.

In the construction of reinforced concrete buildings, tens and even thousands of workers and technical personnel are employed in large projects, the accommodation and other needs of these personnel constitute a separate cost. However, due to adverse conditions such as weather conditions or humaninduced errors, much more costs may occur than originally determined. It is also possible to prevent bad surprises that may arise later, as it is known exactly what materials and how much is needed during the construction of modular buildings. We offer an integrated economic solution by producing most of the materials in our own facilities. Therefore, besides being environmentally friendly, it can easily be said that modular buildings have an intelligent resource management system. While the installation of reinforced concrete structures takes months, it is possible to manufacture thousands of structures within weeks with modular buildings.

It is of course very important for a building to be produced and installed quickly, especially if there are large projects competing over time. However, the most important criterion for a building is durability. Karmod modular buildings are suitable for 1st degree earthquake zones, and with its snow load value and wind speed value, it provides safe use in all seasons. It is also resistant to fire with A1 class fireproof materials used in its structure.

Conclusion. Modular buildings products, produced with state-of-the-art production systems, offer safe use for many years with their materials in accordance with the international standards used in its structure. In our modular buildings that we produce with our superior service guarantee and our stateof-the-art production systems, we also offer different decorative coating opportunities by offering flexible design opportunities. We adapt to the aesthetics of the places you are with our structures. Modular buildings are secure and long-lasting solutions that can be used as worksite buildings, worker camps, dormitories, mess halls, prefabricated office buildings, prefabricated sales offices, prefabricated social facilities, prefabricated hotels, prefabricated restaurants, prefabricated and shower solutions, prefabricated houses, prefabricated housing and so on.

LIST OF REFERENCES:

- 1. Dai, L.; Liao, B. Innovative High Efficient Construction Technologies in Super High Rise Steel Structure Buildings. Int. J. High-Rise Build. 2014, 3, 205–214. P
- 2. Al-Kodmany, K. The Sustainability of Tall Building Developments: A Conceptual Framework. Buildings 2018, 8, 7.p
- of Cities & Towns Sustainability. 3. Charter European towards Available online: Portal.uur.cz/pdf/aalborg-charter-1994.pdf/ (accessed on 10 May 2018).
- 4. Solar Energy in Architecture and Urban Planning; Architecture & Design; Herzog, T. (Ed.) Prestel Verlag: Munchen, German; New York, NY, USA, 1996.