



The Role of Advance Composite material In Contemporary Buildings

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ARTICLE INFO:

Article history:

Received 15 July 2018
Accepted 23 September 2018
Available online 13 October 2018

Keywords:

Contemporary
Building, Composite
Material,
Straw Reinforced Clay
Bricks,
Building Construction

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ABSTRACT

Composite materials have been used from the earliest times, from wood, which is a naturally occurring composite of lignin and cellulose, through straw reinforced clay bricks to reinforced concrete. In the 20th century, a new breed of composite materials was developed using polymer matrices with high performance reinforcement fibres. The great effect and uncompromising properties of advance composite materials has enabled the emergence of composites cut across all fields of application and all areas of work, just to mention a few aeronautic engineering, automobile engineering, and medicine, military and building construction. Therefore, with emphasis on building construction, advance composite material has played a vital role in today's contemporary building construction method, by presenting its self as an alternative building construction material, its application has made the contemporary building construction much more flexible and achievable, compare to traditional building materials and its methods of construction. It further offers the building construction industry the technical know-how of having new possibilities of design styles, shapes and forms. Therefore, advance composite material proves its self to be a better and a new alternative building construction material that remains construction friendly and flexible based on its properties. This study therefore tends to provide an overview on advance composite material, its application as well as its role in today's contemporary building.

JOURNAL OF CONTEMPORARY URBAN AFFAIRS (2018), 2(3), 95-101.
<https://doi.org/10.25034/ijcua.2018.4723>

www.ijcua.com

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1. Introduction

The human race has contributed tremendously to the improvement and processing of elementary building materials, they have become the reference point to mark the early stages of mankind discovery, invention and development, such as Stone Age, Bronze Age, Iron Age, etc. However the beginning of the recent hundred years positioned building materials to become more multifunctional and

as well required the optimization of different properties. The evolution and concept of building materials has also been driven toward composite materials whereby two or more different material parts are being joined

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