Proceedings of the International E-Conference on Novel Innovations and Sustainable Development in Civil Engineering 2020

ISBN	978-93-88122-14-6
Website	www.veltech.edu.in
Received	05-May-2020
Article ID	NISDCE149

VOL	01
eMail	nisdce@veltech.edu.in
Accepted	20-May-2020
eAID	2020.nisdce.149

RETROFITTING OF RC BEAMS USING VARIOUS FRPS STATE-OF-THE-ART REVIEW

Arun¹ Sridhar M²

ABSTRACT: FRP are being used extensively in the rehabilitation and retrofitting of existing structures which are in seismic zones so, they act as an external strengthening material because of their properties like high strength to weight and corrosion resistance, light weight and high durability. This paper deals with comparative study on different types of fibre reinforced polymers like Glass Fibre Reinforced Polymers (GFRP), Carbon Fibre Reinforced Polymers (CFRP), Aramid Fibre Reinforced Polymers (AFRP), Textile Fibre Reinforced Polymers (TFRP), Woven Roving Fibre Reinforced Polymers (WFRP), Natural Fibre Reinforced Polymers (NFRP) and steel fibre reinforced polymers (SFRP).also the suitability of the various FRPs for the different performance requirements such as flexural, shear, torsion and combined forces.

Keywords: FRP Retrofitting, GFRP, CFRP, TFRP, AFRP

This paper is prepared exclusively for International E-Conference on Novel Innovations and Sustainable Development in Civil Engineering 2020 which is published by ASDF International, registered in London, United Kingdom under the directions of the Editor-in-Chief Dr E B Perumal Pillai and Editors Dr. M Vinod Kumar and Mr. R. Saravana Kumar. Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage, and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s). Copyright Holder can be reached at copy@asdf.international for distribution.

 $2020 \ \mathbb{O} \ Reserved \ by \ Association \ of \ Scientists, \ Developers \ and \ Faculties \ [www.ASDF.international]$

¹ PG Student, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Tamil Nadu.

² Assistant Professor, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Tamil Nadu.