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## FLEXURAL AND SHEAR BEHAVIOURAL STUDY OF RC BEAMS RETROFITTED WITH GFRP

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**ABSTRACT:** Retrofitting is becoming an inevitable technique for the existing buildings to cope up with the code provisions and additional strength requirement. Though many structures were retrofitted with the conventional method, introduction of FRP (Fibre Reinforced Polymer) into it makes it more reliable, effective and faster than other methods irrespective of the different functions of the elements of the structure. Among the different types of FRPs, the usage of GFRP (Glass Fibre Reinforced Polymers) has more interest among the researchers due to their admirable structural properties. In this study, an experimental behavioral study of RC beams under flexural and shear, retrofitted with FRP for these 8 beams were casted and retrofitted for flexural and shear separately and tested. The test results were compared with the control beam and notable conclusions were listed and discussed.

**Keywords:** Retrofitting of RC beams, GFRP, Flexural strengthening, Shear strengthening

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