

## Carbon Fibre Reinforced Polymer As Material for Structural Strengthening

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material, CFRP always triggers environmental and sustainable issues due to its hazardous manufacturing and disposal process. By using lesser CFRP with partial confinement, the use of CFRP could be reduced. Optimum mechanism of the installation with various CFRP strips spacing from this research work has managed to conclude sufficient contribution to the design of partial CFRP confinement for structural strengthening application. By proposing the most suitable stress-strain model of partial CFRP confinement will assist other engineers

in applying it in the structural strengthening works. Dr Ruqayyah Ismail and her team led this project. Related work to this research had been published in the Construction and Building Materials (Q1) journal in 2019, won a Silver Medal in INDES 2019 and currently has an ongoing FRGS research grant. This research work improves the current design practice in CFRP structural strengthening. The mechanism of the partial CFRP confinement with the stress-strain in the model proposed is in the progress of obtaining a patent for further commercial application.

