

Strain and Failure Study of Columns Retrofitted with Carbon Fibers¹

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Abstract

This study has aimed to introduce retrofit technology of column with carbon fibers, The results of the study were compared with the findings of international researchers.

The accepted and applied methodology was:

1- Over viewing international studies considering the carbon —fiber retrofit technology of structural elements (columns , joints between columns and beams , joints between columns and foundations etc...)

2- Applying the theory , into experiments with carbon —fiber “jacketed” columns to study the deformations and final failure.

The graphical comparisons between certain international investigations and the results of the experiments in local conditions, are attached to the study.

¹ For the paper in Arabic see pages (67-91).

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