

## عنوان مقاله:

(Axial Compressive Strength of Reinforced Concrete Columns Wrapped with Fiber Reinforced Polymers (FRP

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## خلاصه مقاله:

This paper presents the results of a study on the axial compressive strength of columns strengthened with FRP wrap. The experimental part of the study included testing 6 reinforced concrete columns in two series. The first series comprised three similar circular reinforced concrete columns strengthened with FRP wrap. The second series consisted of three similar square columns, two with sharp corners, and the other with rounded corners. Axial load and displacement of columns were recorded during tests using a displacement control test set up. Test results are compared with the values calculated using CSA (Canadian Standard Association) Code provisions and recent proposed equations. It is shown that the FRP wrap increases the strength and ductility of circular columns, significantly. The recent proposed equations correlate well with the test results of circular and square column with rounded corners. According to the test results, the FRP wrap did not increase the strength of square columns with sharp corners. However, the square column with rounded corner exhibited a higher strength and ductility compared to those with sharp corners.

## کلمات کلیدی:

Column, Concrete, Fiber Reinforced Polymer, Wrap

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1416299>

