عنوان فارسی مقاله:
رفتار منگنه زنی (پانجی، سوراخ کردن) دال های RC تقویت و CFRP اصلاح شده با

عنوان انگلیسی مقاله:
Punching behavior of strengthened and repaired RC slabs

با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک کنید.
In this study investigated the punching behavior of reinforced concrete slabs strength with carbon-fiber-reinforced polymer (CFRP), thirteen RC slabs, each having 965 mm length, 680 mm width, and 60 mm thickness. Tests showed that the effect of reinforce-ment with CFRP was an increase in the failure load. The effect of strengthening with CFRP on preloaded slabs (partially degraded).

With regard to this last test category we raise the following points:

- The cracking load of reinforced slabs is increase by (41%-70%) compared to control slab.
- The CFRP reinforcement the control slabs is increase the ultimate load (31%-58%) compared by unreinforced slab.

Strengthening with CFRP can prevent the growth of large cracks by smaller cracks larger number.

- The ultimate load of slabs preload by 60% is improve by 36%-46% and for slabs preload by 80% is increase by 32%-62%, because the concrete of the second slabs is damaged almost to the phase of failure.
- The deflection is decrease by 1 mm-2 mm for slabs preloaded by 60%, and is decrease by 1 mm-3 mm in slab preloaded with 80% of ultimate load of slab control.
- The reinforcement by CFRP with orientation (0°/90°) is more effective compared to those reinforced by other orientations.

4. Conclusions