



University of Baghdad	
Department	Civil Engineering
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Thesis Title	Strengthening of Reinforced Concrete T- Beams Using External Post-Tensioning
Year	2014
Abstract	<p>This research is carried out to investigate the externally post-tensioning technic for strengthening existing reinforced concrete beams. T-section RC beams have been conducted in this research. The compressive strength of concrete for all beams was 30 MPa. Two strands of diameter 12 mm (cross-sectional area of 98 mm²) have been fixed at each side of the web of tested beams. Special system has been achieved to fix these external tendons with the web of beams. The main parameter conducting in this research is the strengthening ratio (L_s/L)</p>