

## CRACKS TORQUE OF T SECTION R.C BEAM WITH WEB PERFORATION USING REACTIVE POWDER CONCRETE

ALI SABAH AHMED ALAML<sup>1</sup>, HAYDER ABDULAMEER MEHDI<sup>2</sup> & REEM HATEM AHMED<sup>3</sup>

<sup>1,2</sup>Assistant Professor, Department of Civil Engineering, AlMustansiriya Engineering College,  
AlMustansiriya University, Baghdad, Iraq

<sup>3</sup>M.Sc. Student, Department of Civil Engineering, AlMustansiriya Engineering College,  
AlMustansiriya University, Baghdad, Iraq

### ABSTRACT

*A series of ten T section reinforced concrete beams by use Reactive Powder Concrete (RPC) with square and circular web perforation. The geometry and main reinforcement of all specimens are same and was investigated under the effect of pure torsion. The main parameters taking into account in present paper are circular opening size, location of openings, and number of openings. The torque caused the first crack was recorded and the angle of twist generated from this torque was calculated for different parameters mentioned above. The results indicated that the crack torques for first crack decrease in presence of opening and the crack torques decrease when the opening increased.*

**KEYWORDS:** Torque, Cracks, RPC, Web Perforation, T Section

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