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Experimental Investigation of Low Strength Concrete (LSC) Beams Using Carbon Fiber Reinforce Polymer (CFRP) Wrap

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Abstract : Inadequate design of seismic structures and use of Low Strength Concrete (LSC) remains the major aspect of structure failure. Parametric investigation (LSC) beams based on experimental work using externally applied Carbon Fiber Reinforce Polymer (CFRP) warp in flexural behavior is studied. The ambition is to know the behavior of beams under loading condition, and its strengthening enhancement after inducing crack is studied, Moreover comparison of results using abacus software is studied. Results show significant enhancement in load carrying capacity, experimental work is compared with abacus software. The research is based on the conclusion that various existing structure but inadequacy in seismic design could increase the load carrying capacity by applying CFRP techniques, which not only strengthened but also provide them to resist even larger potential earthquake by improving its strength as well as ductility.

Keywords : seismic design, carbon fiber, strengthening, ductility
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