

## Behavior of Double Skin Circular Tubular Steel-Concrete-Composite Column

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**Abstract :** Experimental work on Double skin Concrete Filled tubes (DSCFT) are a variation of CFT (Concrete- filled steel tubular) with a hollow core formed by two concentric steel tubes in - filled with concrete. Six Specimens with three different volume fractions of steel fibres are cast and tested. Experiments on circular steel tubes in - filled with steel fibre reinforced concrete (SFRC) and normal concrete have been performed to investigate the contribution of steel fibres to the load bearing capacity of Short Composite Columns. The main Variable considered in the test study is the percentage of steel fibres added to the in -filled concrete. All the specimens were tested under axial compression until failure state realisation. This project presents the percentage Variation in the compression strengths of the 3 types of Composite members taken under Study. The results show that 1.5% SFRC in filled steel columns exhibit enhanced ultimate load carrying capacity.

**Keywords :** composite columns, optimization of steel, double skin, DSCFT

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