



EXPERIMENTAL STUDY FOR BEHAVIOR OF (WASTE CONCRETE FILLED STEEL TUBULER) COLUMNS SUBJECTED TO A STATIC AXIAL LOADS

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Abstract: *In this study, composite columns have been tested under axial load. The steel tubes were filled with waste concrete to perform the composite action. The specimens divided into two groups; square and circular columns. The diameter of the circular hollow columns was 7.5 cm with 2mm thickness, while the dimension of the square hollow columns was (7.5 cm × 7.5 cm) with 2mm thickness. For each group a column without waste concrete filled steel tubular (W.C.F.S.T) was tested to act as a reference column. Load-deflection curves were constructed for all specimens. The results indicate that the waste concrete filled steel tube has more capacity due to the composite action. The pattern of failure in circular sections was different from the failure pattern of the square ones.*

Keywords : W.C.F.S.T columns; Load -deflection curves; waste concrete; axial load; pattern of failure .