

ABSTRACT:

The objective of this paper is to present the behaviour of composite beam using Trapezoid Web Profiled (TWP) steel section by determining the moment resistance and the deflection of the beam with composite and non-composite connections. The TWP steel section is a built up section where the flange is of S355 steel section and the corrugated web of S275 steel section. Three full scales testing setting-up as sub-assembly frame have been carried out. It was concluded that the use of composite connection and extended end-plate has reduced significantly the deflection and has significantly increased the loading capacity of composite beam.