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# Efficiency of Bending Behavior by Alter the Spacing of Lacing using the Cold Formed Steel I – Section Light Beam

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**Abstract** : Thin walled cold-formed steel members have wide applications in building structures. In cases where beams carry less moment it is uneconomical to use traditional hot rolled steel<sup>2,5</sup>. Cold formed steel is an apt solution for this case. For a latticed cold formed steel flexural member, the moment carrying capacity may be affected mainly by local, distortional or lateral torsional buckling. In this paper, the impact of web opening and lacing spacing on the flexural behaviour of Cold formed built-up I section under two point loading is investigated for the simply supported end conditions. Experimental investigation has been carried out on 7 specimens by varying the depth of the built-up beam. Numerical investigations have also been carried out using finite element analysis software ANSYS13.0. Load vs. Deflection curve, failure modes and ultimate load carrying capacity of specimens are presented in this work.

**Index Terms** : cold formed steel, built-up, latticed, flexural member, two point loading etc...

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