

Analytical Investigation on Behaviour of Cold Formed Deep Joist Channel Section

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Abstract: *The application of cold formed steel elements in construction is becoming very popular due to several advantages like Speedy construction, higher strength to weight ratio, dimensional stability and recycled material. CFS is proposed to use as building components as beams, columns, Joists, wall panels etc. The load carrying capacity of cold-formed steel (CFS) joists can be enhanced by employing optimization techniques. Recent research studies have mainly focused on optimizing the bending capacity of conventional channel with and without lips that are used as joists. The objective of the study is to examine the flexural strength, failure mode and load-deflection of the cold formed steel double furred channel section with and without web openings under flexure.*

Keywords: Cold-formed section, Flexural behavior, Furred section, Joist beam

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