



T-STUBS RESPONSE TO EXTREME LOADING

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Abstract: The behaviour of steel structures is highly influenced by the connections between elements. In multi-storey steel frame structures using bolted end plate connections, the design of connections is based on the component method, using equivalent T-stubs. The ductility of the connection is related to the ability of the T-stubs in developing large deformations in the tension zone. Besides the normal static loading conditions, robustness of structures considers extreme loadings related to the strain rate aspect. The paper presents the influence of the strain rate and of the elevated temperatures on the resistance and ductility of T-stubs, based on experimental results.

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