

Evaluating of Design Codes for Circular High Strength Concrete-Filled Steel Tube Columns

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Abstract : Recently, concrete-filled steel tube columns are highly popular in high-rise buildings. The main aim of this study is to evaluate the axial load capacities of circular high strength concrete-filled steel tube columns according to Eurocode 4 (EC4) and American Concrete Institute (ACI) design codes. The axial load capacities of fifteen concrete-filled steel tubes stub columns were compared with design codes EU4 and ACI. The results showed that the EC4 overestimate the axial load capacity for all the specimens.

Keywords : concrete-filled steel tube column, axial load capacity, Eurocode 4, ACI design codes

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