

A Comparative Study for the Axial Load Capacity of Circular High Strength CFST Columns

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Abstract : The concrete filled steel tube (CFST) columns are commonly used in construction applications such as high-rise buildings and bridges owing to its lots of remarkable benefits. The use of concrete-filled steel tube columns provides large areas by reduction in cross-sectional area of columns. The main aim of this study is to examine the axial load capacities of circular high strength concrete-filled steel tube columns according to Eurocode 4 (EC4) and Chinese Code (DL/T). The results showed that the predictions of EC4 and Chinese Code DL/T are unsafe for all specimens.

Keywords : concrete-filled steel tube column, axial load capacity, Chinese code, Australian standard

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