

Australasian Structural Engineering Research in Steel and Composite Structures and its influence on International Design Codes

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Extended Abstract

This paper will address the Australasian advances in steel-concrete composite bridge and building structures. The paper will firstly provide an overview for the behaviour and design of bridge structures past, present and future. This will then be followed by an overview of the behaviour and design of building structures, past present and future. Over the last decade there have been significant developments on the development of a draft bridge standard for steel-concrete composite structures, namely AS/NZS 5100 Part 6 and salient elements of recent advances will be highlighted in this paper. In parallel with work being carried out on the development of a draft bridge standard for steel-concrete composite structures, namely AS/NZS 2327. Once again, salient features of this standard will be provided in this paper. The paper will highlight how Australasian Structural Research has influenced international design codes, namely Eurocodes and AISC specifications. The paper will conclude with discussions on ongoing and further research that is required in the area of steel-concrete composite structures to deal with the ongoing demands of modern bridge and building structures, (Figure 1).



Figure 1. Concrete filled steel column, 200 George Street, Sydney

References

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