

# The New Response Spectrum Model for Australia

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## ABSTRACT

*This paper presents an overview of recent research in Australia into seismic activity and ground motion modelling which has culminated in the development of a new response spectrum model for Australia as featured in the new standard for seismic actions. An important element of the research is the prediction of the displacement demand of small-moderate magnitude earthquakes that are characteristics of the intraplate tectonic environment of Australia. The practical implementation of the response spectrum model is illustrated at the end of the paper with the case-study of a lifeline facility. Advancements in seismic demand is complimented by the accurate assessment of the seismic performance of the structure and their sub-assemblages including those with non-ductile behavior.*

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