



Direct Analysis Method Case Study - Addressing Stability for the Russia Tower

The Direct Analysis Method, along with other recent refinements on stability in the 2005 AISC code, offers engineers a practical, fundamentals-based methodology for looking at less 'typical' structures. In our practice, we note an increasing number of such projects – complex and unique buildings forms that can be (and indeed are expected to be) quickly defined, studied, modified, and built thanks to ever-improving computational analysis and modeling technologies. Although the Direct Analysis Method (DM) and AISC code address directly only steel structures, with careful integration of concrete material considerations, there is opportunity to apply it to composite structures as well. The following paper outlines Halvorson and Partners approach to applying the Direct Analysis Method and stability concepts from AISC as well as material secondary affects for concrete from ACI to assess, analyze, and design our complex, composite structure – the Russia Tower.

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