



Timber Tower Research Project

<https://research.thinkwood.com/en/permalink/catalogue725>

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 Market and Adoption
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Summary:

The goal of the Timber Tower Research Project was to develop a structural system for tall buildings that uses mass timber as the main structural material and minimizes the embodied carbon footprint of the building. The research was applied to a prototypical building based on an existing concrete benchmark for comparison. The concrete benchmark building is the Dewitt-Chestnut Apartments, a 395-foot-tall, 42-story building in Chicago designed by SOM and built in 1965.

SOM's solution to the tall wooden building problem is the Concrete Jointed Timber Frame. This system relies primarily on mass timber for the main structural elements, with supplementary reinforced concrete at the connecting joints. This system plays to the strengths of both materials. The result is an efficient structure that could compete with reinforced concrete and steel while reducing the carbon footprint by 60 percent to 75 percent.

Online Access: Free

Resource Link

http://www.som.com/ideas/research/timber_tower_research_project