Simpson Strong-Tie

SE Blog Post

**Blog Post Title: Timber Tower Research Project**

**Blog Post Number:**

**Blog Post Date:**

**Categories (select all that apply):**

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**Tags (keywords that describe the content of your post):** wood framing, high-rise

**Content of Post:**

In 2009, Simpson Strong-Tie participated in the [NEESWood Capstone Test](http://www.nsf.gov/news/newsmedia/neeswood/), which was the final experiment in a multi-year study to test and evaluate the seismic performance of various wood-framed buildings. The Capstone Test was a six-story apartment building constructed and tested at the [E-Defense](http://www.bosai.go.jp/hyogo/ehyogo/) test facility, located in Miki, Japan. More information about the Capstone Test is available [here](http://www.strongtie.com/about/research/capstone.html).

Photo: NEESWood.jpg (I just took this one off our website, you may have a better one)

I only mention the NEESWood testing because I thought six-stories was pretty tall for wood-framed construction, since US building codes limit us to 4 or 5 stories in wood. I recently came across a research project by Skidmore, Owings, Merrill for something just a tad taller than that. Looking to minimize the carbon footprint by using timber as the main structural material, SOM published a report for the design a 42-story, 405-ft tall building. The solution utilizes mass timber for the main structural elements with reinforced concrete at highly stressed areas. The project used the Dewitt-Chestnut Apartments, a 42-story reinforced concrete structure built in 1965, as the benchmark building.

Image: timbertowerhero.jpg Caption: SOM Timber Tower

Image from their webpage – since we are linking to their article, I think using their picture is legit, but I’m just an engineer.

Abstract for the [Timber Tower Research Project](https://www.som.com/publication/timber-tower-research-project) along with links to the full report and sketches are on SOM’s website.

So what do you think of a 42-story wood-framed building?

Add at end of every post in WordPress (in HTML version): Item highlighted in yellow needs to be changed.

<p class="email">What are your thoughts? <a href="<http://seblog.strongtie.com/2012/04/raymond-c-reese-research-prize/#disqus_thread>">Visit the blog and leave a comment</a>!</p>