

Shiver me timbers. Architects plan wood skyscraper for resident life

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(Phys.org) —HSB Stockholm, a building society in Sweden, will be 100 years old in 2023 and to mark the date it is staging its architectural competition 2023. One entrant already gaining lots of attention is Berg | C.F. Møller, which has a proposed design of a 34-story solar powered



skyscraper made of wood—well, not entirely of wood, but enough of wood to raise interest. Berg | C.F. Møller Architects are working in partnership with architects Dinell Johansson and consultants Tyréns on a skyscraper that would be seen for miles. The other two competing teams are Equator Stockholm with Mojang (Minecraft) and Utopia Architects with Rosenberg Architects.

The wooden <u>skyscraper</u> is gaining attention as "green" news because of the <u>wood</u> factor proposed. A number of points in wood's favor: C. F. Møller's team noted how timber production releases less carbon dioxide than steel or concrete production, at a time where construction accounts for 30 to 40 percent of the world's <u>carbon dioxide</u> generated from humans. Concrete and steel command a large part of the market, but wood-supporters note that wood is a lightweight, renewable material that can bear heavy loads in relation to its weight.

Cost-wise, they say wood is cheaper to build and better for the environment than using steel-and-concrete for buildings. Wood costs less to transport due to its lightness, too. The C.F. Møller team is thinking in terms of a residential complex. While the building is made mostly of wood, it would have a concrete core. Wooden pillars, beams, walls, and ceilings in the plan are encased within a glass façade, with the walls, ceilings and window frames visible from the exterior through the large windows. Each apartment will have this glass-covered veranda, while the building itself will be powered by <u>solar panels</u> on the roof.









In general, the word "wood" makes some people nervous because of fears of fire. Architects who favor wood, however, argue that wood is safer than other types of building materials and can be more fire resistant than both steel and concrete. Earlier this year, an article in the Toronto Sun took note of what Geoff Triggs, building code consultants expert, had to say about the use of wood in high-rise construction. Rather than using small two-by-fours super-compressed mass timber is used to make very large panels. The compressed lumber is as strong as concrete but lighter. The compression process creates dense wood blocks that are difficult to burn.

More information: <u>www.cfmoller.com/r/Wooden-Skyscraper-</u> <u>i13265.html</u>

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