

Avi Friedman

Pre-Fab Living



Thames
& Hudson

urban heights

The Stack
New York, New York, USA
Gluck+

The Stack is the first pre-fab, multi-unit residential building in New York, and addresses the need for moderate-income housing in the city. It is also a pilot project for developing an economically viable solution for strategically rebuilding and filling gaps in outmoded housing. To achieve this, architectural firm Gluck+ turned to pre-fab construction, as off-site manufacturing has the potential to accelerate the building schedule, shorten the financing period and turn risky sites into opportunities.

The seven-storey building was designed initially according to residents' needs, and then 'cut' into pieces that could be manufactured in a factory in Pennsylvania. During fabrication, the foundation and infrastructure were built on site. A steel column grid structure was built on top of the poured-in-place foundation to receive the modules and allow for wider spans for commercial premises. Although there was a short delay when the Department of Buildings asked to review the permits, the build time was still shorter than it would have been with conventional construction. Eventually, the off-site modules and on-site preparations came together for a four-week period of installation. A small team of eight bolted the modules in place, connected the utilities and added finishing touches, before securing the façade to the side of the building.

With the ground floor reserved for commercial use, the six storeys above were kept for residential use. In total, fifty-six modules were used to create twenty-eight units, comprising six studios, six one-bedroom, fourteen two-bedroom and two three-bedroom apartments. The



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individual units are articulated, but can be read together as a whole, while different combinations provide structural integrity and a range of layouts. When the modules are stacked together and lined up, they create an open, flexible floorplan that can be customized by inserting interior partitions.

The building as a whole is designed for durability and elegance, with sealed concrete floors, high-performance aluminium windows and tenant-controlled heating and air-conditioning. Kitchens have Corian countertops with undermounted sinks and maple cabinetry, stainless-steel appliances and WaterSense fixtures, and there is access to a communal outdoor terrace, as well as additional private terrace space for 35 per cent of the units, along with a 'virtual doorman' who greets residents upon entry to ensure their safety. The location, too, is convenient, with easy access to parks, public transportation and major roads.

During construction, The Stack functioned almost as a work of art, capturing the imagination of the neighbourhood as locals could watch the progress of the building before their eyes. As a result of the success of this residential pre-fab, the architects are exploring other options in modular construction, using The Stack as a case-study for future projects.

Previous pages
Courtyard (left) and
exterior view (right).

Right
Kitchen.

Below
Living room.



Space-saving, eco-friendly and cost-efficient, pre-fab houses have never been more attractive. From cabins to containers, this international overview showcases the next generation of innovative homes suitable for dense urban areas and idyllic rural hideaways alike.

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