News Story:

Hope on Alvarado: From Shipping Containers to Modular Habitat

By Edward Locke

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Hope on Alvarado, a privately-owned five-story apartment constructed with modular units, designed and built by HBG Modular, at the center of Los Angeles, has been open since 2020 for socially marginalized residents.

The metal-framed modules that look like shipping containers are prefabricated in China and transported to the site, crane-lifted, stacked and connected, much like giant plug-in Legos, atop a concrete podium. They are "earthquake-safe, hurricane-safe, termite-safe, molt-proof," said Danny Moizel, builder from HGB Modular. As a native of Los Angeles, he used to build luxury mansions for a living; he feels "great satisfaction building hope on Alvarado." He told abc-7 News, "I see tens of thousands of people on street; and I feel that as a builder, I have a responsibility."



Danny Moizel from HGB Modular interviewed by abc-7 News (image source: https://www.youtube.com/watch?v=Vms-IkRbYbk)



Mark Oberholzer, architect who designed the Hope on Alvarado apartment (image source: https://ktgy.com/people/mark-oberholzer/)

This innovative project, the first of a series of Hope On developments aimed at alleviating the housing crisis of socially marginalized residents in Los Angeles, is an accomplishment of the partnership between private and public sectors, involving community leaders, developers, government agencies and other stakeholders. Its development has been privately funded jointly by HBG Construction Corp., Aedis Real Estate Group and others. HBG Modular, the designer and builder of this apartment, collaborated with developer Hope Street Development Group/KTGY to bring this project to reality. According to Scott Baldridge, president of Aedis Real Estate Group, the Alvarado project is funded with low-income housing tax credits and tax-exempt bonds. For other projects, such as Hope on Broadway and Hope on Hyde Park, the

developers have also received a combined \$16 million in local loans through the city's Proposition HHH fund, a \$1.2 billion bond measure approved by 77% of Los Angeles County voters in 2016, with the intention of providing some 10,000 housing units for socially marginalized residents, with support services like mental health care and drug and alcohol treatment. Due to higher cost of materials as a result of Trump administration's 25% extra tariffs on Chinese steel, HHH loans became a necessity. According to abc-7 News, the project's original budget was US\$27 million, roughly US\$321,000 per unit, compared to US\$700,000 per unit for other projects. The actual per-unit construction costs range from \$400,000 to \$425,000. A significant portion of spending is on up-front research and development as well as the inclusion of ground-floor facilities to house supportive services.

"The building serves qualifying economically and socially disadvantaged residents," said Tiffany Tran, Supervisor of Rental Service, "they pay 30% of rent out of incomes from Social Security, General Relief and other programs, and the remaining 70% of rent is paid by a special public assistance program managed by the Office of Diversion and Reentry under the Department of Health Services of Los Angeles County." Staff of the apartment's managing team on site provide services to residents, such as getting a doctor's appointment or a driver's license.



The Hope on Alvarado apartment's exterior (Photo by Edward Locke)

Located at 166 South Alvarado Street, Los Angeles, CA 90057, at the cross-section between Alvarado Street and Valley Street, by the bus stop of Metro Bus No. 2, Hope on Alvarado apartment is a few blocks away from Westlake/MacArthur Park and Metro Red Line Station, a public space for recreation with a lot of stores and street vendors. The modular apartment took one year to complete, compared to two years for similar project built "the old fashion way." The apartment building features convenient and comfortable amenities for residents, such as a Community Room with tabletop games, TV lounge area and full kitchen, two Conference Rooms with resident computers and classroom settings, bicycle storage, laundry facility, free resident WIFI, fully furnished apartment units with bathroom and kitchen, central air and heating, and a good-sized office for caseworkers.

According to mass media reports, in this technically innovative apartment project, two basic modules measuring 8 feet by 20 feet and 8 feet by 45 feet are used; the longer modules include the corridor and half of each unit. 168 modules with unit plan sizes of 400-480 sq. ft. deliver 84 housing units; some are 320 sq. ft. studios while others are 480 sq. ft. ones. "The nicest aspect of the units is the amount of glass," said the architect of the project Mark Oberholzer, Associate

Principal at KTGY Architecture + Planning, "To me, and I don't know if everyone would agree, the aesthetic of the building is more like a high-end condo building. And for people that at first spend a lot of time in their units, having a lot of natural light is important."

The building occupies a site area of 0.44 acre; and has a parking for 10 spaces. The modular units are eight feet wide by 45 feet long and equipped with customized interior fittings and finishes. They have been built in China, transported to Long Beach and to the construction site, and assembled on site to create studio and one-bedroom apartments ranging from 400 to 480 square feet; and they feature floor-to-ceiling windows and interior fixtures and finishes, including windows, drywall, tiling, plumbing, electrical, bathrooms, etc., which have been completed off-site. The building has been constructed around a central courtyard with a stage, and rooftop garden/decks, which together create outdoor zones for lounging and socializing, providing privacy, safety and a sense of community, as a place of hope and dignity for the socially marginalized residents in Los Angeles.

Before the on-site construction, the modular portions have already been inspected by US based approved inspectors at the factory in China; therefore, site-work is unobtrusive, intuitive and quick; and inspectors on site from the Los Angeles local housing authority only need to check the utility connections and foundations. The stackable modular construction techniques from this highly replicable design can deliver housing at faster speed and larger scale. In projects designed and built "the old fashion way," developers try to make the most of an oddly shaped site, designing around possible corners to fit in extra units. For modular construction, the process of the designs can be duplicated over and over.





Bird's eye view of the Hope on Alvarado apartment building (image source:

https://www.youtube.com/watch?v=ExqJLINdWHw)

Digitally rendered image of the apartment building's central courtyard with a stage on the right (image source: https://www.youtube.com/watch?v=ExqJLINdWHw)



Prefabricated module fully equipped with kitchen and bathroom features (image source: abc-7 News, https://www.youtube.com/watch?v=Vms-lkRbYbk)



Digitally rendered image of interior space of a modular unit (image source: https://www.youtube.com/watch?v=Vms-lkRbYbk)



The apartment building's central courtyard with a stage (image source: https://ktgy.com/people/mark-oberholzer/)



Digitally rendered image of the apartment building's central courtyard with a stage on the right , and rooftop garden/decks, top and bottom (image source: https://ktgy.com/people/mark-oberholzer/)

The Hope on Alvarado apartment is one of a series of Hope On projects. Additional projects include Hope on La Fayette (668 South Hoover Street, Los Angeles, CA 90005), Hope on Broadway (5138 South Broadway, Los Angeles, CA 90037), Hope on Hyde Park (6501 South Crenshaw Boulevard, Los Angeles, CA 90043), and Hope on Avalon (12225 South Avalon Boulevard, Los Angeles, CA 90061). All of them are located in Los Angeles; and according to the website of HBG Modular, they use similar modular construction techniques and proprietary pre-fabricated steel modules (NOT recycled shipping containers, as wrongly reported by some local mass media).

Some other companies are using recycled shipping containers to build affordable housing for low-income families. In Salt Lake City, Utah, Eco Box Fabricator is building a six-story high apartment with 1 or 2 bedroom units, with recycled shipping containers welded together, as reported by abc-4 News, June 2, 2021.

Locally in southern California, as reported by Pasadena Star News, August 29, 2019, Kubed Living, a design firm located in Sherman Oaks, is specialized in designing buildings using recycled shipping containers, nick-named "cargotecture." They include a variety of units that are customized and designed to fit easily into someone's backyard, ranging from simple home offices to full-scale living units.

Turning recycled shipping containers into affordable housing units is a great idea in serving the housing needs of American families with limited income.



The apartment building's central courtyard (image source: https://ktgy.com/people/mark-oberholzer/)



Plan for one bedroom (image source: https://www.hbgmodular.com/alvarado)



Interior of the Community Room in the Hope on Alvarado apartment building (image source:



(image source: https://www.youtube.com/watch?v=ExqJLINdWHw)

https://www.youtube.com/watch?v=ExqJLINdWHw)



Digitally rendered image of the kitchen corner in the Community Room (image source: https://www.youtube.com/watch?v=ExqJLINdWHw)



Plan for studio (image source:

https://www.youtube.com/watch?v=ExqJLINdWHw)





The 6-story apartment built in Salt Lake City, Utah, by Eco Box Fabricator (image source: https://www.youtube.com/watch?v=6GjYCvuJOQs).

Plan for the Courtyard (image source: https://www.youtube.com/watch?v=ExqJLINdWHw)