

Building Sacramento's First Modular Project

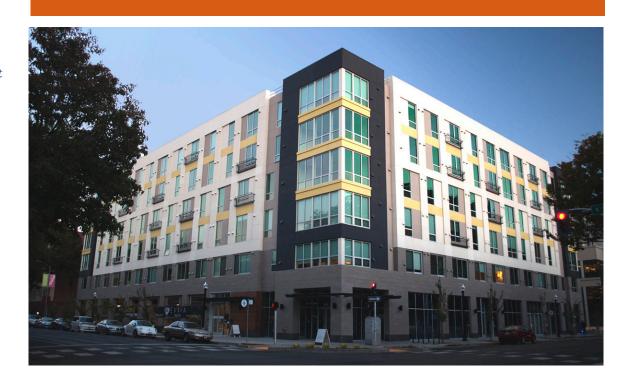
Certified CALGreen Project. Sacramento's largest modular project to date, initiated by Capital Area Development Authority (CADA).

Owner: The Warren LLC

Architect: LDA Architects

Devrouax & Purnell

Lowney Architecture



Project Description

Ideally located along the 16th Street corridor, where downtown & midtown Sacramento intersect, Eviva Midtown was built in 2016 and features certified CALGreen modular construction. The Class A apartments offer gourmet kitchens with stainless steel appliances, in-unit washer and dryer, and oversized windows providing views of the downtown area and Capitol Park. Parking is on grade and at subterranean levels. The 250 modules were precision built and prefabricated off-site, resulting in a high quality, energy efficient building completed in less time than typical construction. The Project won the Best Real Estate Projects Award Innovative Category - Sacramento Business Journal 2017 Building type: IIIA wood over Type 1 Concrete Construction - six-story, 176, 521 square feet.

Modular Construction

The construction industry has been in search of innovation to offset the high demands on labor and safety concerns on site. Not to mention the losses occurred when quality standards are not met. Conventional construction methods have over time proved to not only be labor-intensive but increased concerns with health and safety. The unpredictable nature of the supply chain, procurement cost and weather conditions has further increased the stress on construction quality and schedule.

PMC (Permanent Modular Construction) meets the IBC (International Building code) and is similar to onsite construction except that it is completed in a factory setting. Volumetric Modular Construction is mostly completed by combining two dimensional and wall panels. The prefabricated modular interior is equipped with MEP. This type of construction is ideal for schools, hotels, multifamily and health care facilities.

Customer's Challenge

The prime goal of the development team for the Eviva was delivering a quality product using the safest possible methods of construction. While changing the modular manufacturer the development team implemented some design modifications and structural changes. To give the building a more distinctive appearance the balconies were widened and added a broader color palette. This required substantial coordination between Guerdon and Tricorp. The 118 units that filled the apartment mix were transported over 500 miles from Boise, Idaho to Sacramento.

The Solution

Supply Chain Optimization and Integration: The modular unit design was complicated due to the unit mix and unique nature of balconies. There was considerable challenge in the transportation and staging of the units. To facilitate the safety of the units Tricorp used the nearby Railyard Area for the layout and repair of the units damaged in the long haul from Boise to Sacramento.

Site Safety: Safety is one of the primary concerns at a construction site. Due to the offsite construction the labor on site was limited thereby increasing the project safety exponentially and increasing productivity due to the lack of delays due to weather and procurement.

Sustainability: There is a reduction in wastage of materials as the exact amount of material is easily determined in controlled facility with the limited labor on site and the implementation of rigid-safety measures on site.





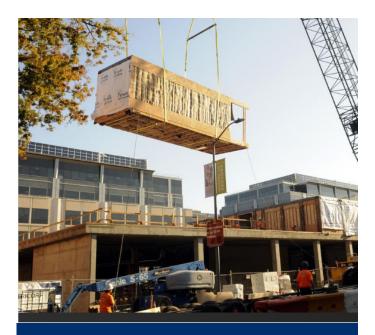
Reduced Construction and Maintenance Costs: Construction costs were reduced as the need to hire labor was decreased on site. However, this was offset by the increased design costs which was required to leave no room for error once the modules are completed. There was also the challenge of labor shortage in California during the construction period of this project. Off-site construction offset some of those challenges.

Reduced schedule: Design and Procurement are concurrent in modular construction and increase efficiency in the manufacturer's facility. Staff is trained while procurement is in process hence multiple items are eliminated from the schedule resulting in a saving time.

Quality Check: Coordinating regular quality checks with the Guerdon team was important to ensure minimal defects in the final product.

Sequoia Equities purchased Eviva Midtown trophy apartment community for \$53 million or \$450, 000 per unit bringing a quicker return on investment. The property commanded the highest price per unit ever paid for a multifamily sale in the region. This sale is a testament of Tricorp's success in safely delivering a quality project.





Common Amenities Include:

- * 24-hour fitness center
- * Community Lounge
- * Entertaining Kitchen
- * Courtyard with Fire Pit
- * Barbecue
- * Enclosed Parking Garage with Controlled Access



Modular construction was put to test with a team without previous modular experience. Tricorp became our partner to work with the architects, engineers, subcontractors, City of Sacramento, and other Authorites having jurisdiction to deliver a fantastic product.

- Matt Samuelson, *President*IntegralGude, Program Management



