



ClarkDietrich®

24th & RIO GRANDE HOUSING AUSTIN, TX

Efficient Use of Cold-Formed Steel Through Prefabricated Panelization

This project demonstrates the effective use of cold-formed steel (CFS) products through innovative design, prefabrication, and installation strategies. By leveraging a panelized construction approach and advanced attachment methods, the project achieved significant gains in efficiency, cost control, and overall quality while meeting complex logistical and structural demands.

The project made highly efficient use of cold-formed steel products by adopting a prefabricated panelized system. This approach maximized the strength-to-weight ratio of the CFS by enabling panels to be stacked efficiently and connected using the DriftTrack attachment method. The result was a robust, continuous exterior building envelope that enhanced structural performance while minimizing material usage.

A key component of this efficiency was the implementation of a value engineering solution. The project transitioned from a traditional construction approach to a fully prefabricated panelized system, significantly reducing construction time and overall costs. This shift streamlined on-site activities, reduced labor requirements, and minimized material waste, resulting in a more economical and sustainable construction process.

The installation process required specialized means and methods due to the use of prefabricated panels. Custom solutions were developed to address challenges related to transportation, handling, and on-site installation. Careful planning and coordination ensured precision and efficiency throughout each phase of construction.

Installation conflicts were proactively addressed through meticulous engineering of the lifting and placement process. Each panel was carefully designed to be safely lifted and securely attached to the building structure, preserving alignment, stability, and overall system integrity.

The project also required specialized equipment and consideration of complex conditions. Transportation logistics were carefully managed to prevent damage to panels during transit from the panel shop to the jobsite. A combination of crane operations and a monorail system was utilized to position the panels accurately and safely. Additionally, work at elevated heights required close monitoring of weather conditions, particularly wind and precipitation, to mitigate safety risks and avoid delays.

PROJECT AFFILIATES

Architect: Rhode : Partners

Engineer: Excel Engineering, Inc.

General Contractor: Rogers-O'Brien Construction

Sub-Contractor: Galindo & Boyd

Distributor: L&W Supply



MANUFACTURING COMPLEXITY AND HIGH-QUALITY WORKMANSHIP

The manufacturing process was highly streamlined through the use of pre-cut materials based on detailed panel shop tickets. This approach reduced fabrication time and improved accuracy, allowing for consistent quality across all panels.

Panelization played a central role in the project's success. Entire assemblies—including framing, sheathing, windows, vents, weatherproofing, and the EIFS system—were fabricated off-site in a controlled panel shop environment. This integrated process enhanced precision, reduced on-site variability, and significantly accelerated the construction schedule.

Material sourcing was also optimized by ordering components pre-cut and organized by building levels. This strategy minimized waste, improved material handling efficiency, and maximized the productive use of the panel shop workspace.

Overall Job Quality and Project Outcome

From alignment and finish to fulfillment of the original design intent, the completed system exceeded expectations. The precision achieved through panel shop fabrication and the seamless installation process allowed the project to remain on schedule, enabling interior trades to begin work as planned—a critical factor in meeting the project's tight timeline.

Despite the complexity of the design, the consistency and quality of the prefabricated panels ensured that every detail was executed accurately. The result was a high-performing exterior system that met both structural and aesthetic objectives, reflecting a successful integration of innovative construction methods and meticulous planning.

