

RAYTHEON CONTINUES THRIVING WITH DESIGN-BUILD METHOD



Located in Richardson, TX at the upscale CityLine mixed-use development, Raytheon's new facility consists of three campus-style buildings designed to accommodate future expansion. With ideal security and privacy, a training room, full-service cafeteria, fitness center, an extensive data center, and a prime location near public transit and major freeways, Raytheon continues to thrive as a \$24 billion defense contractor in the LEED-certified facility.

The Situation

When Raytheon was looking to relocate nearly 2,000 employees from its original campus built in the 1950s, they envisioned a state-of-the-art facility that would include high security, diverse workspace options, flexible meeting rooms, an abundance of windows, aesthetic designs, and satisfying dining options to attract and retain top-notch engineers. Raytheon needed to be out by the time their lease ended in 15 months.

The owner, KDC, sought to provide a new home impeccably tailored to Raytheon's culture, talent acquisition, and mission-critical needs. However, going from design to construction on a fast schedule wasn't feasible through the conventional plan-spec method. Due to Raytheon's nature of work, an expertise in working around sensitive compartmented information facilities (SCIFs) and other restricted areas was critical.

The Solution

By collaborating early through the design-build method, KDC and TD were able to tackle the aggressive timeline and later alterations with reliability and ingenuity. Weekly meetings with decision-makers, trusting relationships, and transparency played a pivotal role in streamlining the process. Constructability engineering, adequate manpower, minimal RFIs, and a no change-order guarantee were essential to completing the project on time and within budget.

Raytheon by the Numbers

- (2) three-story buildings
- (1) four-story building
- 500,000 sf approximate total
- (1) modular CUP
- Finished in six months

TACKLING AGGRESSIVE TIMELINES WITH RELIABILITY AND INGENUITY



TD provided mechanical and plumbing engineering design and construction for the three buildings including two three-story buildings and one four-story building. The facility included a fully prefabricated modular central utility plant (CUP) measuring 45 feet by 20 feet. The plant was manufactured offsite and installed within one day of delivery. By utilizing modular construction of the CUP, critical savings included one month of labor, as well as, significantly reduced equipment costs. Additional work included chilled water serving building A with DX rooftops serving buildings B and C.

Some of the cost saving and value-added innovations provided by TD's constructability engineers included spiral duct instead of rectangular duct, plug and play reduced pressure zone (RPZ) device in wall connect manifolds in each breakroom, and therma-fusers with a grill for huddle rooms. TD's expertise in building data centers, healthcare facilities, offices, and government facilities provided the best in security throughout the project.

The Success

The conventional plan-spec route would have taken at least a year to complete Raytheon's new home, but KDC's decision to pursue the design-build method with TD resulted in a 500,000 sf facility being finished in six months. TD's LEED-accredited professionals collaborated with KDC and Raytheon to meet necessary standards and criteria, and delivered a sustainable, innovative facility without compromising on quality and performance.

Raytheon is a prime example of TD's turnkey capabilities. Our Controls and Service Teams were awarded the contract to complete the full life-cycle of the building.

TD Controls' knowledge of the project from their early involvement, with budgeting and designing the building controls, was key to the project's success – bridging the gap between our construction group and service as they began their service agreement for HVAC, electrical, fire/life safety, and automation.

"The performance of TD has not only met but surpassed our expectations for the Design-Build implementation. The D-B approach and the level of team work between TD and Walker Engineering has been key to the success of the project, allowing the team to be nimble, flexible and responsive to Raytheon's ever-evolving needs and still meet our contractual commitments."

– Mike Rosamond, KDC Executive VP

