

TAMU Innovation Student Housing

Houston, Texas



STORIES BUILT



Located adjacent to the Texas Medical Center in Houston, Innovation Plaza is a five-acre medical and housing development that will serve as home to the Texas A&M University (TAMU) Engineering Medicine program. The complex features three towers housing research facilities, affordable student housing, office and retail space and parking. Ceco Concrete provided formwork services—including the pouring of vertical concrete—for the 20-floor student housing tower.

Ceco formed a post-tensioned (PT) concrete flat slab structural system for the tower, with columns, an elevator core and a stair core. The PT slabs are eight inches thick, enabling occupant ceiling heights of 9 feet 4 inches for comfort. The slab thickness also helped reduce material costs for the project owner. The highly constructable design required very few changes during the project, from start to finish. We were proud to be part of a great construction team.

To overcome logistical challenges, Ceco leveraged in-house equipment that was readily available and easily modified to accommodate the site's space constraints.

GOING VERTICAL ON A TIGHT FOOTPRINT

The student housing tower is sandwiched between three existing structures on a small site, which made formwork selection and design a critical component of this project. Ceco engineers needed to consider size and weight restrictions for the onsite crane along with the limited flying space surrounding the building.

For the walls, elevator core and stair core, the Ceco team used the lightweight Ceco Aluminum Wall System with Ceco Aluminum Truss Tables because the panels and tables could be handled with ease by the tower crane. The design of the truss tables was highly dependent on the direction available for stripping tables—due to the tight site constraints, the Ceco team had to develop a detailed and specific stripping plan. To free up critical crane time, Ceco used the Aluma handset forming system for columns.

With a typical floor measuring about 19,000 square feet, it took two concrete pours to construct each level. The Ceco team followed a six-day pour cycle and was often able to reduce that cycle time with scheduled pours on Mondays and Thursdays for each floor.

The Ceco team safely topped out July 1, 2021, to the benefit of all. When complete, the facility will provide onsite affordable housing for medical students in the growing medical center district.

FAST STATS

- Project Owner:** Texas A&M University
- Developer:** Medistar
- General Contractor:** Harvey Builders, IQI Construction
- Designer/Architect:** Kirksey Architecture
- Structural Engineer:** Walter P. Moore
- Ceco Scope:** Formwork services, including pouring of vertical
- Ceco Project Manager:** Kenneth Mack
- Ceco Superintendents:** Patrick Davenport, Juan Carlos Paez
- Ceco Engineer:** Jose Ramos
- Date Completed:** July 2021