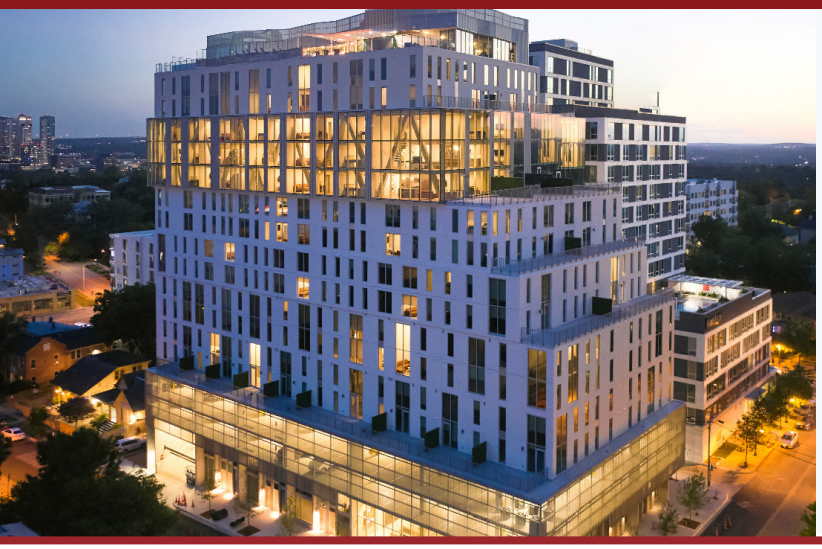
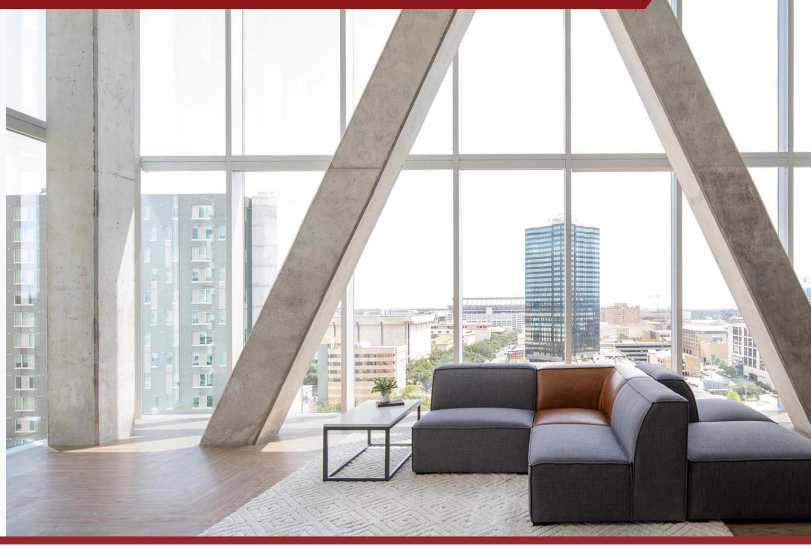
THE TORRE STUDENT LIVING

Austin, Texas





COMPLETION DATE
July 2021

SERVICES
Structural Engineering

ARCHITECT
Rhode Partners

GENERAL CONTRACTOR
Rogers O'Brien Construction

KEY PERSONNEL
David Cumming, PE, SE
Principal-in-Charge

Mark Kaiser, PE, SE
Project Manager

Meagan Weaver, PE
Project Engineer

PROJECT DESCRIPTION

The Torre is a residential high-rise tower built in the heart of Austin, which is directly west of the University of Texas Campus and conveys both industrial and modern luxury. The 18-story concrete framed structure has a wide variety of residential floorplans with 275,000 square feet of living, workspace, and parking. The building also features an amenity deck with a rooftop pool, social media lounge, fitness center, sky lounge, and multiple terraces.

This property had a 62-degree angled stepback line above the 8th floor, which resulted in the need for reducing floor plate areas between Levels 9 and 18. The stepback line and the maximum building height limit provided unique opportunities for the design team. A stair-step pattern of floor plates was developed, which allowed for more rentable interior space and more exterior terraces. From the early development concept sketches, RLG was engaged to incorporate solutions from cantilevered slab edges to traditional transfer beams; however, due to the lack of depth in several key areas, the concept idea of a Supertruss was developed. The 3-story Supertruss transfers loads from the rooftop deck to offset column positions below while keeping within the overall building height limits.

Shallow post-tensioned concrete beams were used as the top and bottom chords of the truss at Levels 13 and 16, respectively, and sloped concrete columns were used as the truss diagonals. The Supertruss was expressed within the individual residential units and expressed overall by using exterior glass walls. This exposed concrete framing became the showcase signature element of this project.

The Torre is the winner of 2021 ABC National Excellence in Construction Award and has been submitted for the NCSEA 2022 Structural Engineering Excellence Award.