

Towering Transformation



*Yale Revamp
of Historic
Structure
Embraces
Green Design*





Photo Credit (all): Stantec

By SCN Staff

THE mention of New Haven, Ct., might bring to mind a sense of history and tradition, but a recent revamp of an iconic Yale University structure clearly has the future as its top priority.

Yale University has reopened Kline Tower, the tallest building on the university’s campus and previously host to its biology labs. The revamped tower—now part of Yale’s Faculty of Arts and Sciences division—introduces open-concept programming space that spurs knowledge-sharing and networking across key departments and disciplines.

Global integrated design and engineering firm Stantec led design services and extensive infrastructure upgrades for the tower renovation project, part of a broader strategic investment in Yale’s vibrant Science Hill area. The makeover of Science Hill is centered in Yale’s long-term plan to boost science and engineering on campus and provide more multidisciplinary collaboration and learning opportunities for both students and faculty.

The 16-story, 186,000-square-foot Kline Tower is targeting LEED® Gold certification and now shines as a modern innovation hub for faculty, administrators, and students in the Departments of Mathematics, Astronomy, Physics, and Statistics and Data Science. The building is additionally home to the Institute for Foundations of Data Science and a popular event space for the Yale community.

Stantec transformed the existing mechanical rooftop penthouse into an impressive faculty lounge and seminar floor that showcases 360° vistas of New Haven and Long Island Sound. A familiar beacon on Yale’s campus, the building’s crown is now adorned



with a color-tunable LED lighting system that can be adjusted for special occasions, meetings, and lectures.

Honoring History, Spurring Connection

“We are honored to support the preservation of an iconic building on the esteemed Yale campus,” remarked Shawn Maley, principal for Stantec. “The design reinforces



Yale's goal to enhance cross-departmental collaboration through interconnecting stairs and collaborative amenity spaces, by eliminating boundaries and reinforcing a sense of community."

Originally constructed in 1966 and designed by architect Philip Johnson, the tower is set at the center of Science Hill at Yale. Each department boasts an interconnecting three-floor stairway that furnishes access to special shared amenities. Space benchmarking with peer institutions was undertaken to right-size the workspaces and amenities, with a focus on fostering flexibility and collaboration between faculty and students.

At a point in time when human connection is highly prioritized by students and staff alike, the up-to-the-minute design kept in-person experiences as a constant focus of the project—including evolved lecture spaces, faculty offices, collaboration areas, lounges and flexible classrooms. The top-floor addition was designed as a boutique faculty lounge and conference suite that is easily converted from relaxed gatherings to special events or lectures. The new ADA glass connector vestibule on the first-floor links Sloane Physics Laboratory and Kline Tower together, which forms an essential topographic windbreak because of high winds at the location. On the concourse level, the new entry from Sachem's Wood ties the southern campus to Kline Tower through a three-story connecting stair and lobby.

Meeting Green Goals

Yale is turning to new technologies in the building that will rely on occupancy data and sensors to track and minimize energy usage, an initiative that is part of the university's dedication to reaching zero actual carbon emissions by 2050 (with an interim goal to achieve net zero emissions by 2035). In orientation with Yale's needs, Stantec focused on sustainable features for this project that included: a redesigned exterior thermal wall, which boosts energy efficiency via a modern insulated barrier; new occupant-sensing temperature, lighting, and plug-load controls to lower energy usage when rooms aren't in use; and 47 advanced utility meters that track energy use in real time.

Stantec took the lead by providing a fully integrated team, including architecture,

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interior design, engineering, landscape architecture, lighting, acoustics, information technology, audio and video, security, and sustainability services. Stantec also completed a planning and energy performance study for the project. These efforts were all developed in partnership with Yale's Office of Facilities and programmatic stakeholders.

Stantec is ranked as a top 10 design firm by Engineering News-Record and Architectural Record and has ranked as the #1 A/E firm by Building Design + Construction for 11 consecutive years.