



Structural Engineer &
Landscape Architect:
Klepper, Hahn & Hyatt

Owner:
SUNY Upstate Medical University

Location:
Syracuse, NY

Completed:
2008



SUNY Upstate Medical University Vertical Expansion

The Vertical Expansion of SUNY Upstate Medical University is a six-floor addition of approximately 230,000 square feet. Designated as the Golisano Children's Hospital, the top two floors more than tripled the space devoted to pediatric services. The other floors in the East Wing expansion were dedicated to cardiovascular, neurology, and oncology services.

Klepper, Hahn & Hyatt performed a structural feasibility study to determine how the existing building could support a vertical addition and satisfy the new building code seismic requirements. KHH designed external seismic upgrades for the project in order to minimize the disturbance to internal hospital operations. Two of these upgrades were designed to fit within elevator and loading dock additions.

This project's construction site was defined by a restricted urban setting, thus adding a level of difficulty to the project. Transfer trusses at the eighth floor allowed for wider column spacing from the eighth to the twelfth floor. The trusses also cantilevered ten feet past the north and south faces of the original building.

The Children's Hospital entrance now features a number of complex structural elements. A glass-enclosed "treehouse" entrance on the eleventh and twelfth floors is supported by the elevator and stair shaft towers. These floors are laterally tied to the main building and cantilever over the towers on the other three sides. At grade level, the east entrance includes intricate structures such as tree-like canopies, artistic retaining/site walls, and a complex entry at the base of the stair and elevator shafts.