

Project Team

CM Agency: Turner Construction
Design Architect: Hopkins Architects
Executive Architect: Payette Associates
Engineer: ARUP

Project Data

Occupant: University
Size: 265,000 SF
Total Height: 4 plus Penthouse
Function: Research Labs and Offices
Construction Dates: 9/4/2007 to 11/2/2010

Architectural Features

Exterior façade is primarily a glass curtain wall system in aluminum framing with aluminum sunscreens. There is a large four story glass atrium with bridges on each level connecting the lab and office buildings. The atrium is covered by a large glass skylight with PV trays above it for shading and aesthetics.



Construction Logistics

The first phase of construction was Demolition of the current building and parking lot onsite. Next 49,364 CY of rock were blasted to prepare for the foundation. After the foundation was complete the concrete cores were completed all the way up to the penthouse level. Then the structural steel went up and tied into the concrete cores. The exterior façade and roof were then completed which lead to the final step of the interior fit out.

Structural System

The Structural system is comprised of a steel building with six concrete cores for vertical transportation that act as shear walls. The cores have 6" concrete poured in place slabs while the steel system has composite metal decking with 4.5" of concrete topping. This adds up to a total of 1,564 tons of steel and 18,309 CY of concrete.

Mechanical and Electrical

3D Building Information Modeling was used for the coordination of the MEP systems. There are 5 AHU in the Lab penthouse which supply air to the entire lab building and exhaust 390 fume hoods. The atrium and office building are controlled by 7 AHU located in the basement. All the offices have chilled beams and the AHU have a heat recovery system and VAV boxes. The entire building receives its power, chilled water, and steam from the campus plant.