

DESIGN LAB

NEW YORK HALL OF SCIENCE



PROJECT DESCRIPTION

Project: **Design Lab**

Client: **New York Hall of Science**

Location: Queens, NY

Completion Date: June 2014

Total SF: 11,000

Project Team: SITU Studio,
SITU Fabrication,
Laufs Engineering Design (LED)

Materials and sources: WAC Lighting,
Fatboy, Sunbrella, Capri Cork, Global
Industries, Ikea, Simplified Building,
McMaster Carr, McNichols

The New York Hall of Science called on SITU Studio to re-envision its 11,000 SF Lower Central Pavilion transforming the space into a hands-on center for learning. Design Lab is a series of activity spaces – each of the spaces are distinct in scale and character and are designed to host a diverse array of STEM and project-based learning activities. Conceived of as a site to foster and promote problem ideation, testing and displaying results – the architecture is intended to be integral to the types of critical discovery and making that is so central to NYSCI's mission.



Before: Lower Central Pavilion, New York Hall of Science

LOWER PAVILION



The creation of four distinct programmatic spaces within the Lower Central Pavilion allows for a diverse range of activities - from collaborative large-scale constructions in the Sandbox, to flight experiments launched from the Treehouse - children, parents and educators work with a variety of materials and scales.

SANDBOX



Sandbox is an open landscape where visitors work on floor-based design problems that deal with large distances and scales. Undulating, dune-like surfaces constructed from flat sheets of CNC scored and cut plywood topped with a cork-rubber composite flooring material provide both functional cabinetry work surfaces and multi-level seating.

READING NOOK



A hang-out nook nestled underneath the existing staircase affords opportunities for quiet reading and discovery.

BACKSTAGE



Steel trusses and columns, perforated metal screens, sliding aluminum and fabric panels, as well as pulley and rope rigging systems, comprise the material and functional palette of Backstage - a flexible space for performative sciences such as shadow puppetry and costume design.

BACKSTAGE



Moveable screens and pivoting bulletin boards allow the space to seamlessly toggle between open and closed.

STUDIO



Based on materials typically found in home construction (with a twist) - Studio provides a more enclosed space within the overall Pavilion - allowing for smaller scale and more focused work, leading to deeper exploration.

STUDIO



Multi-height work and display surfaces, moveable tables, stackable seating, abundant lighting and drop-down power sources offer flexibility with respect to programming and presentation space.

DETAILS



Structural details and connections are exposed throughout the Studio as well as the other lab spaces suggesting the link between making in both model and full-scale. Tucked away from the energy of the workshop activity, at the intersection of large structural timbers, one finds another break-out nook for independent study.

DETAILS



From perforated plywood that functions as cladding and screens, to resilient flooring adapted to serve as pin-up surfaces, familiar materials are used throughout Design Lab in new and playful ways.

TREEHOUSE



Wrapping the existing concrete column, the Treehouse is comprised of a series of elevated pods that add verticality to the Lower Central Pavilion landscape while providing new vantage and experiment points for visitors. Reclaimed redwood from former New York City water towers, and re-purposed locally-sourced birch logs make up the base and branches of the Treehouse space.

TREEHOUSE



Integrated seating and work surfaces comprise the outside-facing perimeter of the Treehouse. Structural connections are exposed throughout.