

The new wing of faculty offices and meeting rooms for the School of Architecture at the University of Virginia develops an enriched set of connections within and beyond its community of students and faculty that were designed to transform the School's identity and culture. A dense spatial matrix added to the south wall of Campbell Hall creates a structure for enhanced interaction between the faculty and students of the School's four disciplines and the broader university, as fertile ground for collaboration and innovation.

Within a porous framework opening to the north into the studios and south to the landscape, the offices and common spaces create new pathways for collaboration, reframe the perception of dynamic environmental processes and connect the school to a deep reading of the site and the rich history of its paradigmatic university setting.

Conceived as a multi-sensory catalyst for new insights combining an aesthetic of precision with one of grounded material durability, the South Addition was developed as a finely crafted instrument, for engaging and interpreting the world.

William Sherman, Architect  
with SMBW Architects  
2005 - 2009

## South Addition to Campbell Hall

School of Architecture, University of Virginia



Photo: Scott Smith

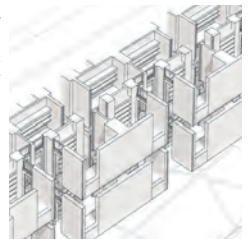
## Constructing Connections

Project Origins  
Landscape Readings  
Interpreting the Paradigm



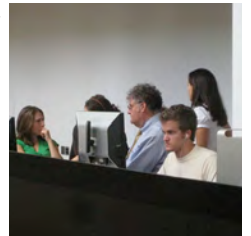
## Connecting Faculty

The Office Matrix  
The Porches



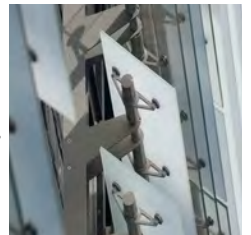
## Connecting the Community

The Technology Bridge  
Research Classrooms  
The Conference Room



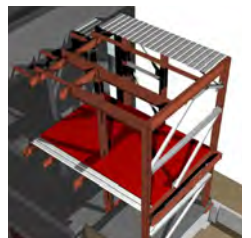
## Connecting to the Environment

The Outdoor Classroom  
The Louvered Wall  
The Sundial Stair



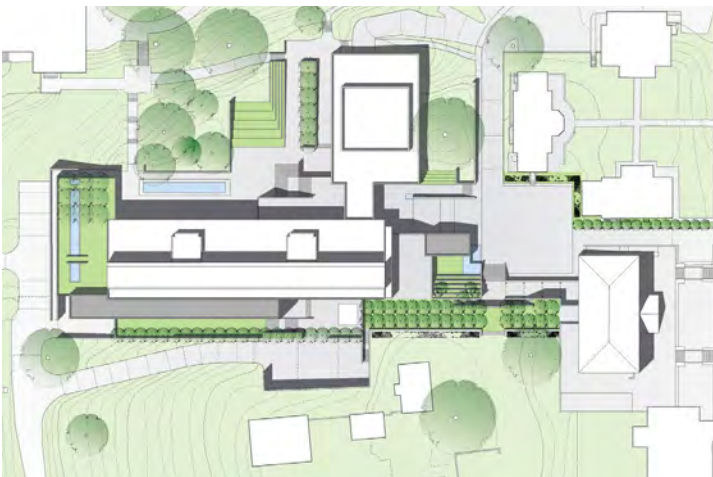
## Connecting to the Curriculum

Analysis and Representation



## Table of Contents





The design of the South Addition to Campbell Hall began with a desire to represent the values of the School of Architecture in the fabric of its building through a series of faculty commissions under the leadership of Dean Karen Van Lengen. A unique collaboration was formed between the design faculty responsible for two simultaneous additions and the professional office, SMBW Architects of Richmond, Virginia. Warren Byrd, a faculty member and principle of Nelson, Byrd, Woltz, Landscape Architects, worked with both Bill Sherman and W G Clark on the design of the spaces surrounding and linking their respective additions to the south and east of Campbell Hall. The South Addition's primary purpose is to provide much needed office space for the faculties of Architecture, Landscape Architecture, Architectural History and Urban and Environmental Planning, while adding new meeting spaces for faculty and students.

*In working with Bill for the design and execution of Campbell Hall's South Addition we functioned as true peers, respecting and enlarging each other's vision and ideas. With Bill as the design lead and our staff as the experts for technical and process issues, we found easy collaboration and dialogue between our respective arenas and responsibilities, and across the typical divide of our otherwise traditional roles. The result was a process and an outcome that enriched and expanded our firm's view of the reciprocal duties and obligations that practice and academia used to – and still should – extend to each other.*

Willard Scribner, SMBW Architects

Strategic Plan  
SMBW Architects

Photo above right: Scott Smith

## Constructing Connections: Project Origins



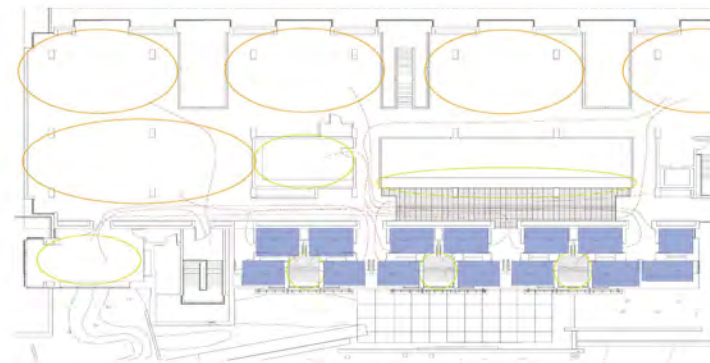


In a site with a complex geology of deep mineral upheavals and alluvial deposits of red clay, the ubiquitous bricks of the university grounds were employed to provide a gravitational anchor, while the suspended horizontal bar of offices was clad in layers of local Buckingham roofing slate.

The section by Warren Byrd relating the plant structure of the Piedmont forest to the spatial structure of the building provided the inspiration for the vertical layering of the addition. The bioswale demonstration garden at the base filters the storm water from the roof and ground surfaces along the edge of a grotto-like outdoor classroom. The offices inhabit a space analogous to the tree canopy, behind filtering louvers of translucent glass that track the sun like photosynthetic leaves.

## Constructing Connections: Landscape Readings





Plan Diagram:  
Arch 8010 Studio Analysis

The spatial structure of the South Addition reflects a concept integral to Thomas Jefferson's urban and campus plans: the interweaving of built and natural spaces to create a rich array of connections between inhabitants and their environment. Within the matrix of the Lawn, the Colonnades, Pavilions and Gardens, the Academical Village is a catalyst for the informal interaction between students and faculty, while connecting each to the dynamics of the world beyond. The spatial interlock of the studios and offices in the South Addition creates a rich seam for collaborative encounters that are at the core of a vital, innovative culture.

Constructing Connections: Interpreting the Paradigm



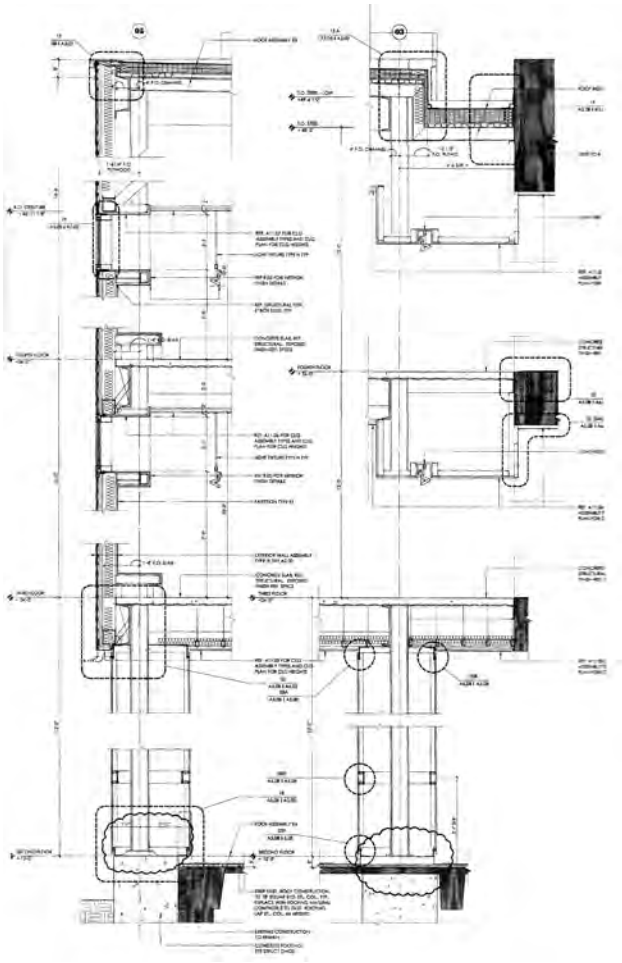
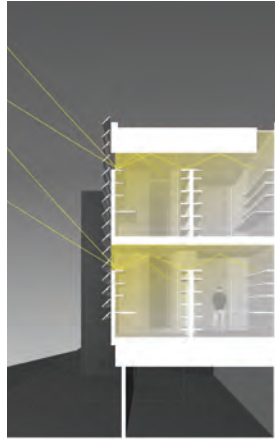


Photo: Scott Smith

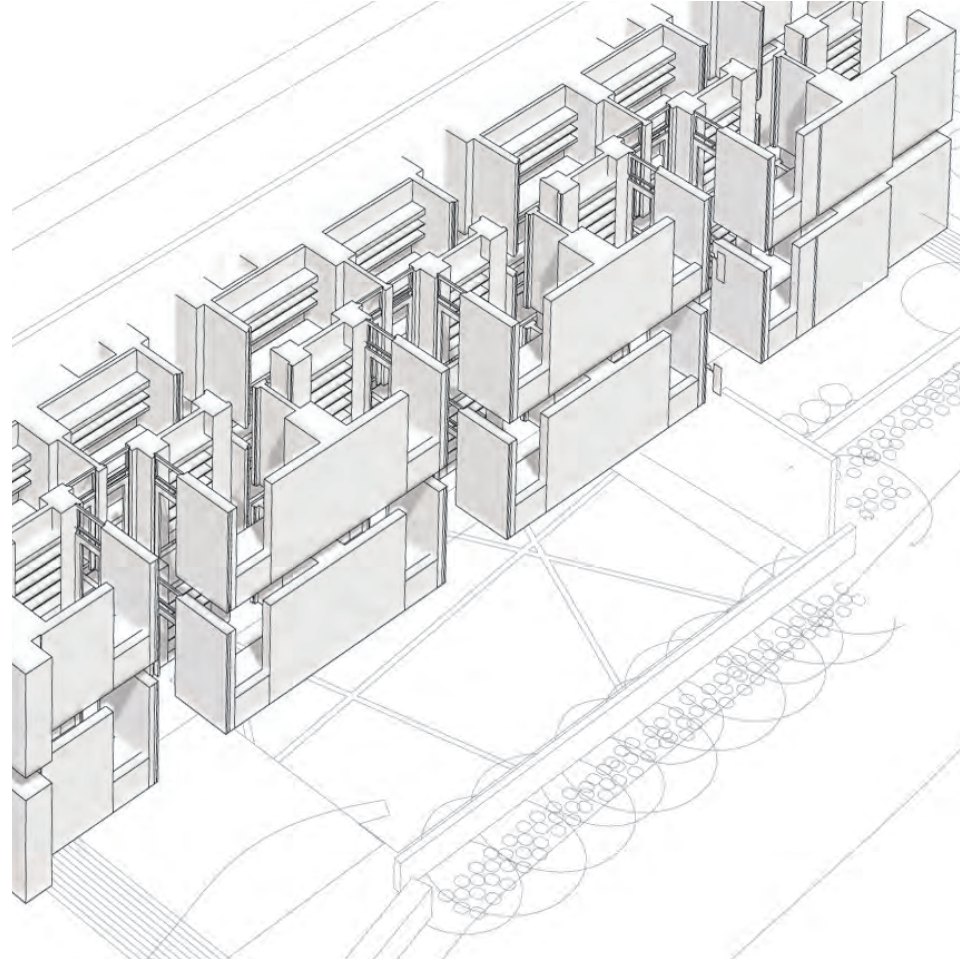


Twenty six offices and two small meeting rooms were clustered in an interlocking pattern along two levels of the south wall of the studio, creating overlapping groups of faculty drawn from diverse disciplines. The direct adjacency to the studio is balanced by the opening up of an entirely different world through the porches to the south, providing a strong sense of enclosure simultaneously with an understanding of the continuity of the dense field that forms the thickened wall. Daylight permeates the space through transoms while glass doors provide both light and ventilation from the thermally mediated porches.

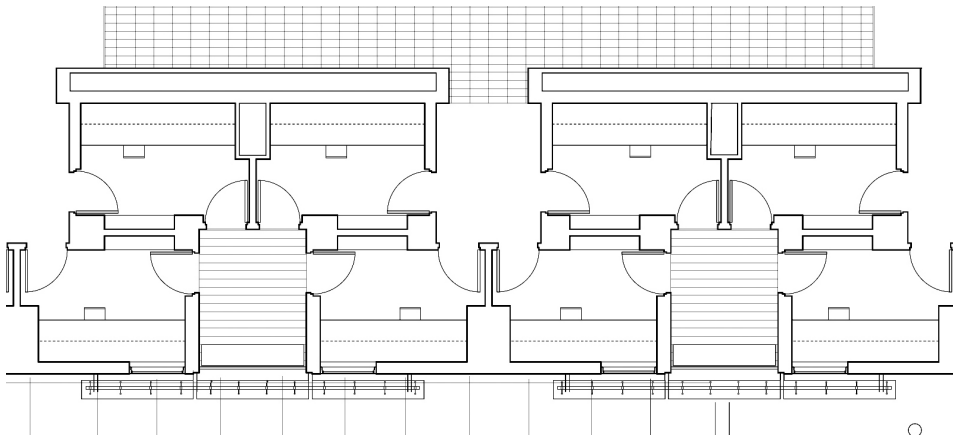
## Connecting Faculty: The Office Matrix



Photos: Scott Smith (lower right and upper left)



Digital Model: Jeana Ripple



Each office was designed like a cabinet, tuned to the body, the warmth of the wooden surfaces relating to the dimensions of human use. Using the thicknesses of shelving and desks to provide surfaces to diffuse the changing light, the artificial lighting echoes the daylight, reflecting off the ceiling to provide an even luminosity. The inner offices borrow light from the transoms and porches, lining their walls with additional shelving and the brick of the original exterior wall.

## Connecting Faculty: The Office Matrix



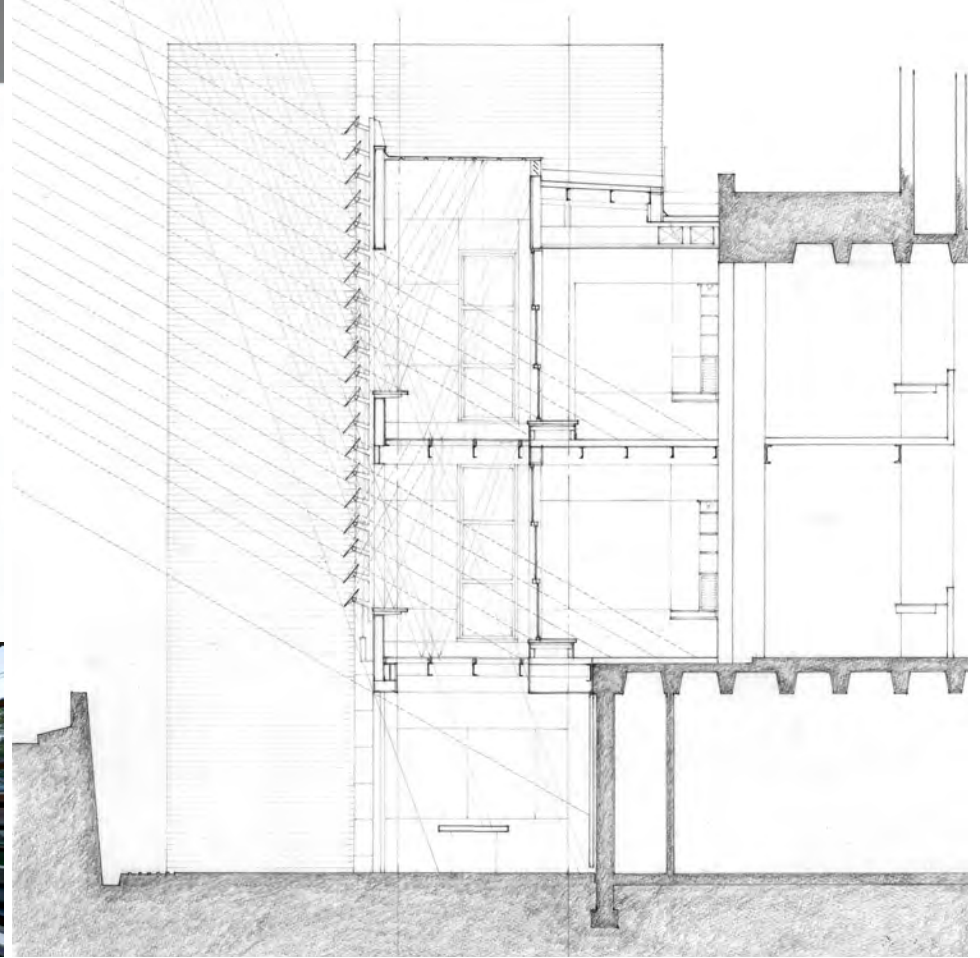
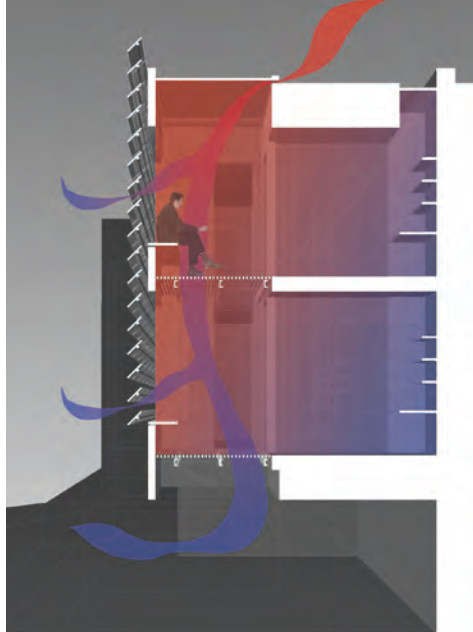


Photo: Scott Smith

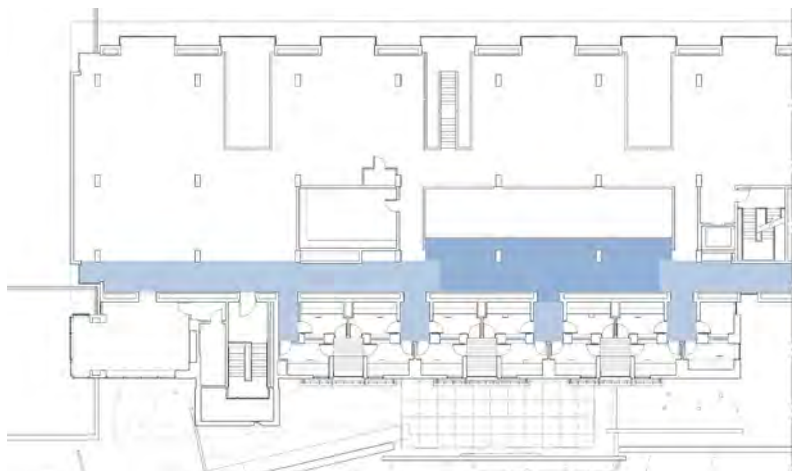
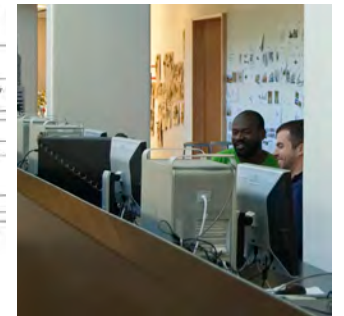
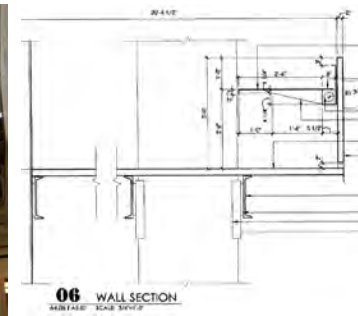
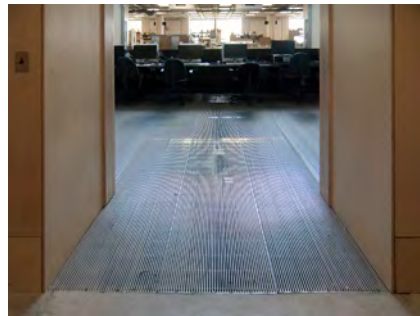
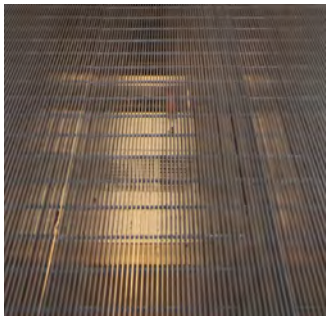
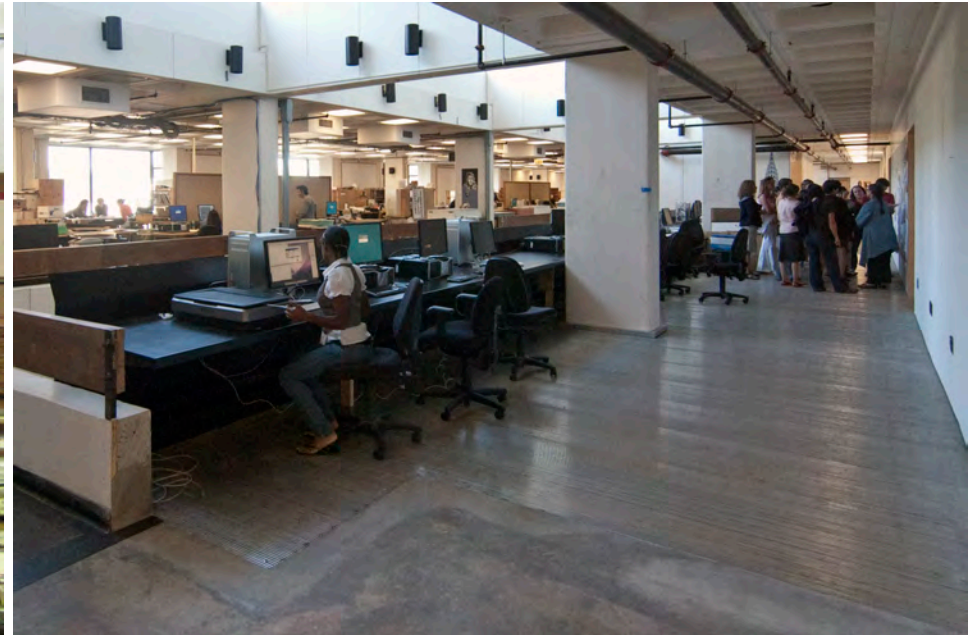
Drawing: Leigh Herndon



At Monticello, Jefferson designed a sequence of connecting spaces between his “cabinet”, or study, and “portico”, a south-facing louvered porch that allowed him to step outside in the course of his work. In the South Addition, a similar idea is employed as a shared space linking four faculty offices. The perforated wall, inspired by the aerial gardens of Le Corbusier’s Immeuble Villas, brings light and air deep into the building, connecting faculty through their common experience of this mediated environment.

## Connecting Faculty: The Porches

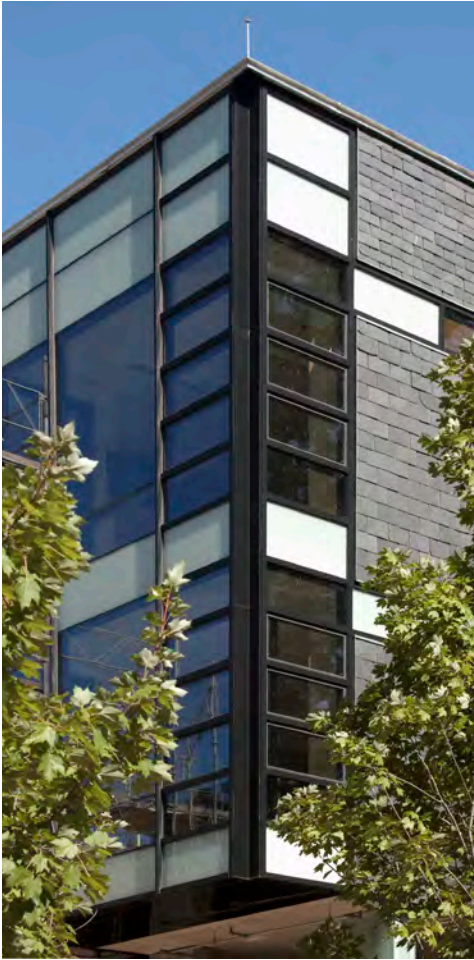




An existing double-height space in the center of the studios provides daylight and a monumental scale to the lower floor. In order to provide access to the offices, avoid a secondary corridor and create needed space for computing and informal reviews, a bridge of aluminum grating spans between two previously dead-end balconies. It is a space of continual student/faculty exchange, the cantilevered bent steel desk/rail occupied around the clock. A dramatic slot of space has been opened along the entire south wall, culminating in an existing corner window to the west: a new scale within the density of the studio.

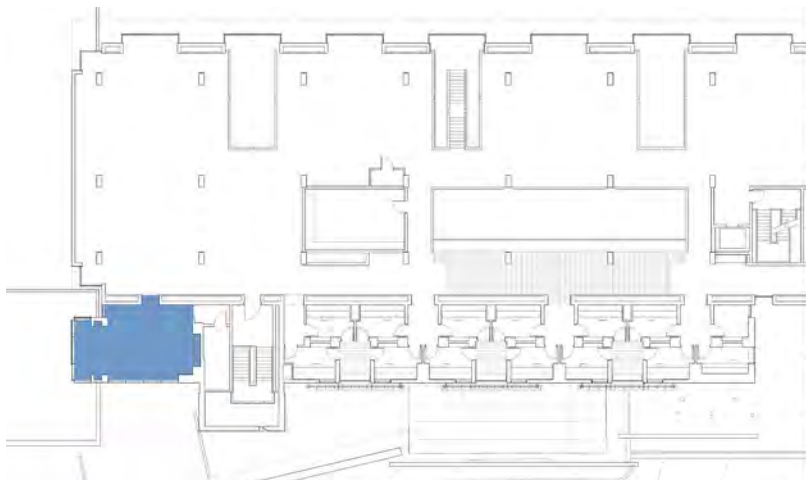
Connecting the Community: The Technology Bridge





Steel and Paperstone Tables designed by Robin Dripps and Lucia Phnney

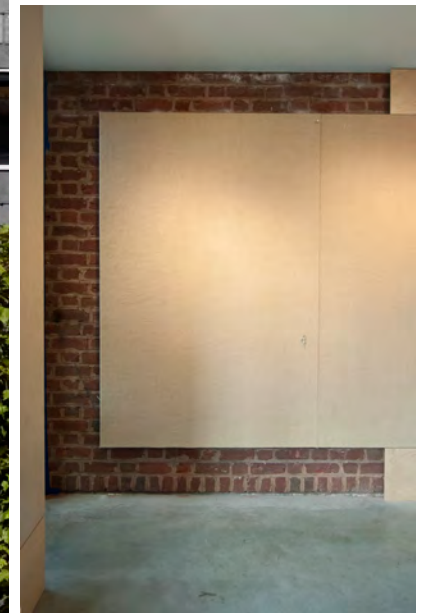
Photo: Scott Smith



On the third and fourth floors, adjacent to the studios at the west end of the new addition, two rooms open to the light and the view of the distant mountains. They were conceived and have been used as seminar rooms, research centers, workshops and review rooms. With digital display technology in an alcove behind folding pin-up surfaces on the east wall, the rooms enable the intensified perception of the tangible world for a disciplines enmeshed in the virtual. Light shelves diffuse the southern sun, bathing the rooms in reflected daylight.

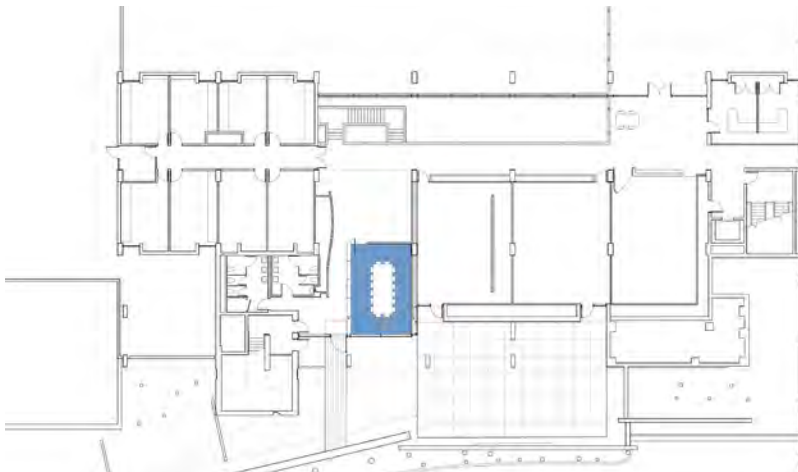
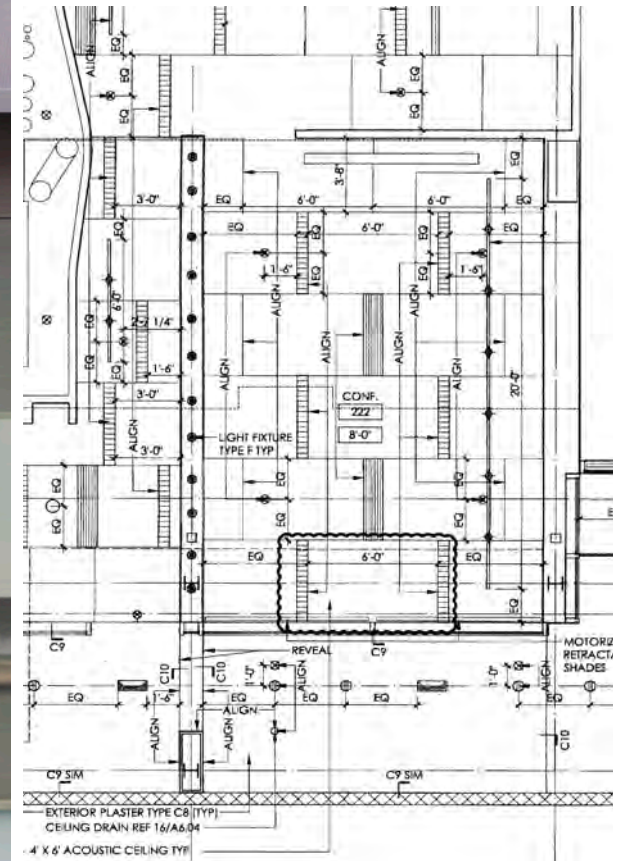
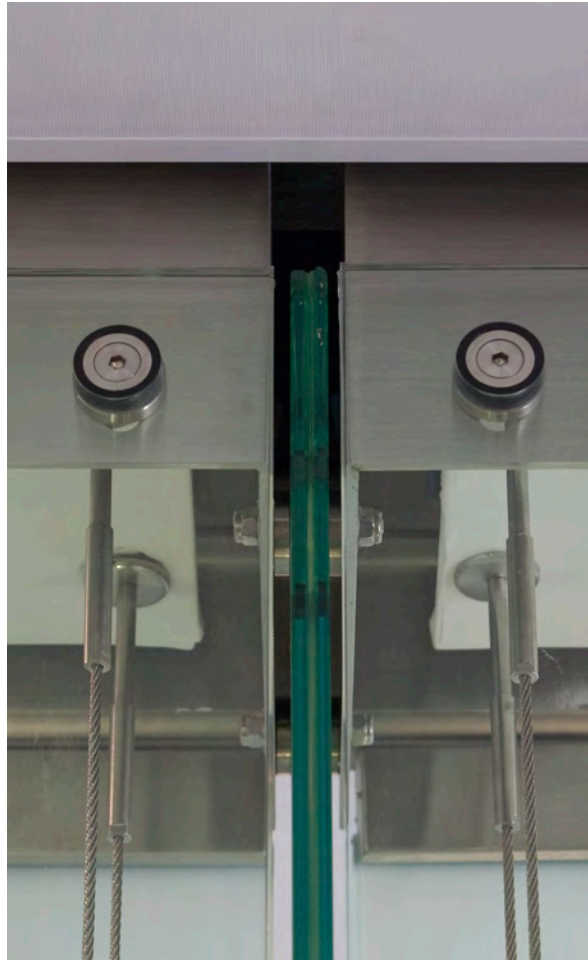
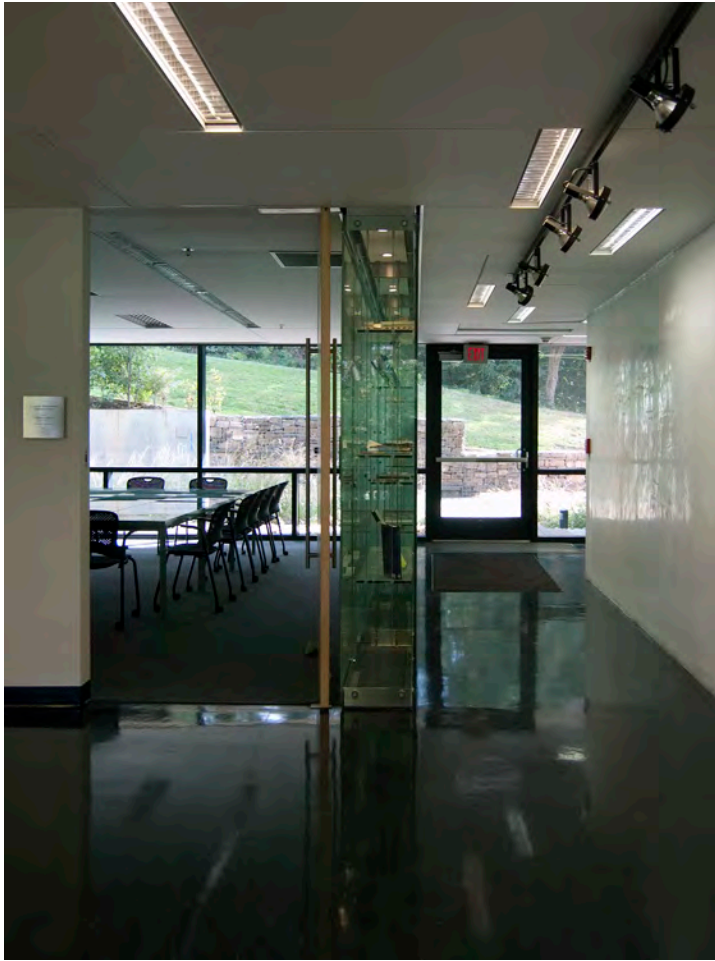
## Connecting the Community: Research Classrooms





Connecting the Community: Research Classrooms





The conference room sits at a critical crossroads within the school, at the joint between the Arts Commons to the north and the teaching landscape to the south, between the administrative wing to the west and the public core of the school to the east, and between the studios above and the classrooms and workshops below. The space is therefore a hybrid interior with four distinctly different walls: a translucent exhibition case on its west side, a wall of glass to the south garden, a wall for projection and communication along the east and a large pivot door to the south. The new north-south passage piercing a former retaining wall is framed by a subtly curved plaster wall and the display of the school's work.

## Connecting the Community: The Conference Room





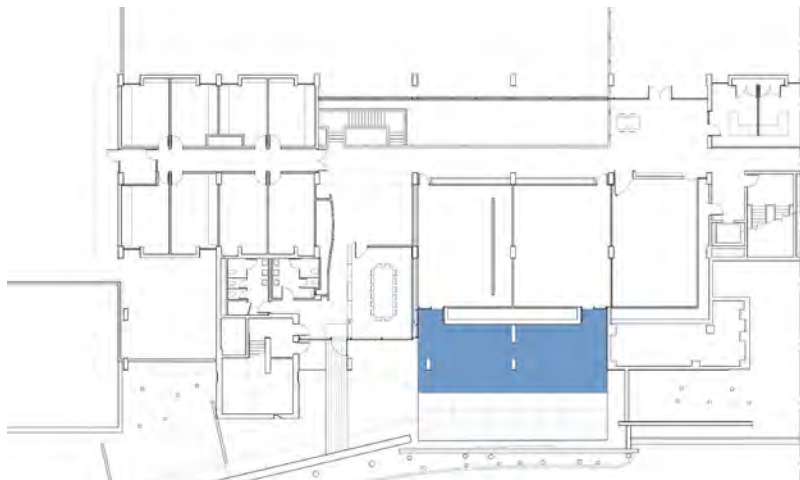
Glass and Steel Tables designed by Robin Dripps and Lucia Phinney

Connecting the Community: The Conference Room





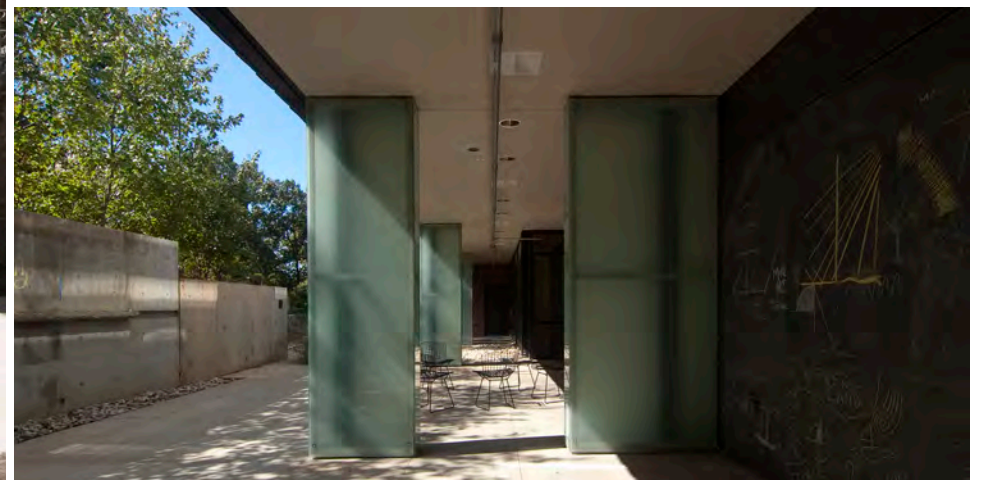
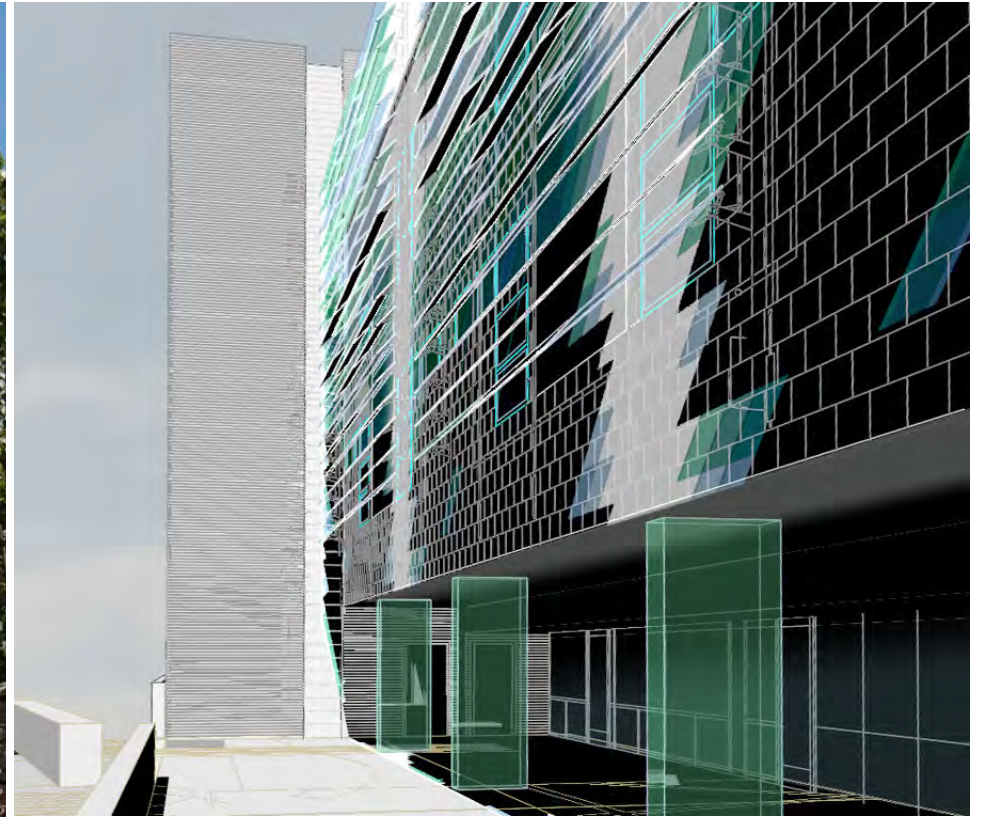
Photo: Scott Smith



Embedded under the new addition against an retaining wall now pierced to provide light to review rooms within, the Outdoor Classroom is calibrated to the sun's path and the thermal retention of the materials to create a microclimate that extends the long spring and fall seasons. In the summer, the grotto provides a cool oasis; in winter, the low sun provides radiant warmth. In this shadowy space, translucent glass column enclosures capture and re-radiate the changing sunlight. The rough slate of the shingles above has been honed here to transform the building's walls into chalk boards, for use by studios and seminars.

## Connecting to the Climate: The Outdoor Classroom

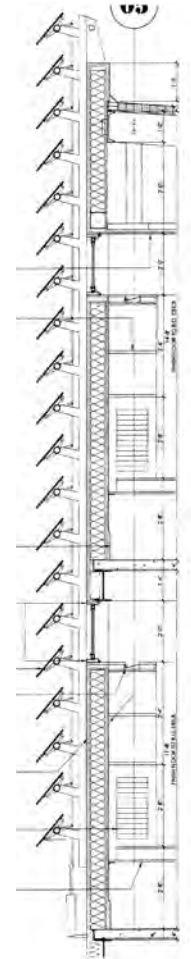
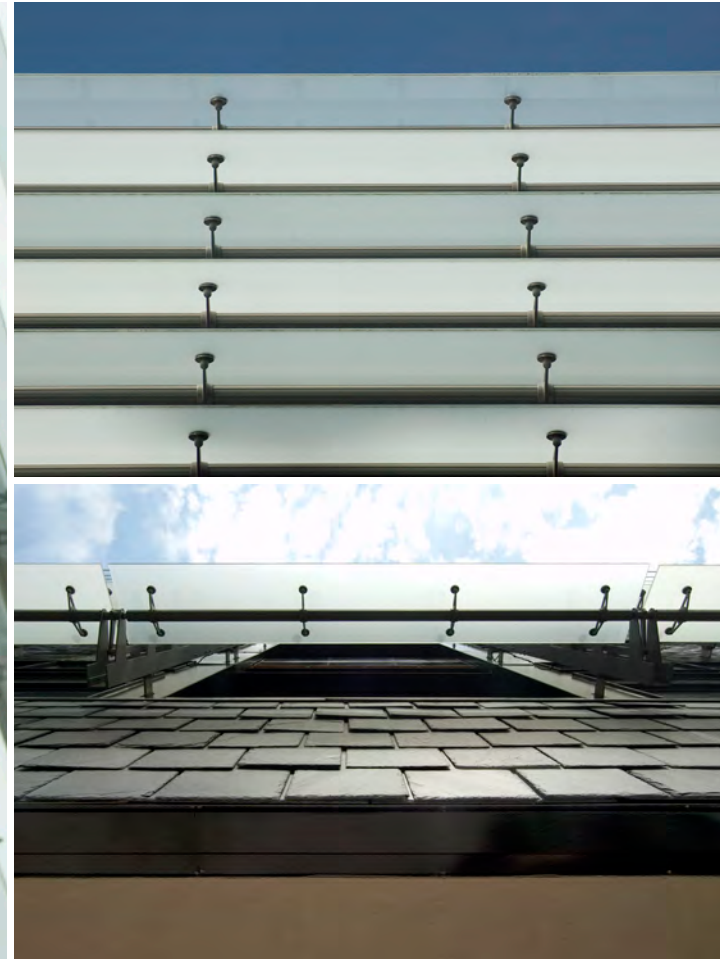
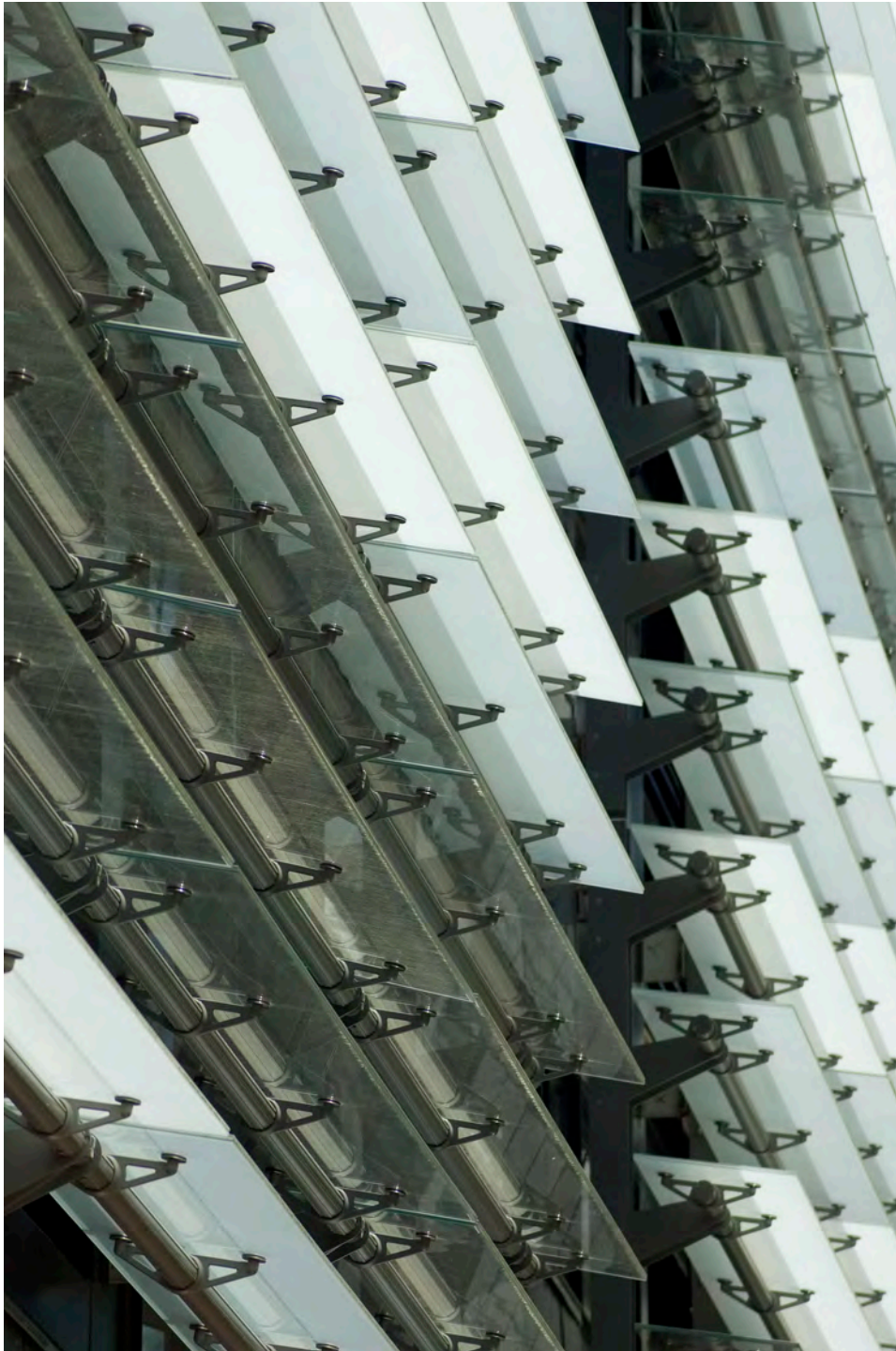




Digital Model above: Jeana Ripple

## Connecting to the Climate: The Outdoor Classroom





Glass louvers shade the south-facing windows and porches, reflecting and refracting the light and heat in an array of transparent and translucent leaves. Computer-controlled to track the sun and respond to changing weather conditions, they open to the summer breezes, limit the winter winds and are equipped to accept thin-film photovoltaics. The patterning of the panels allows views at eye level, while diffusing the higher light entering the exterior offices and porches.

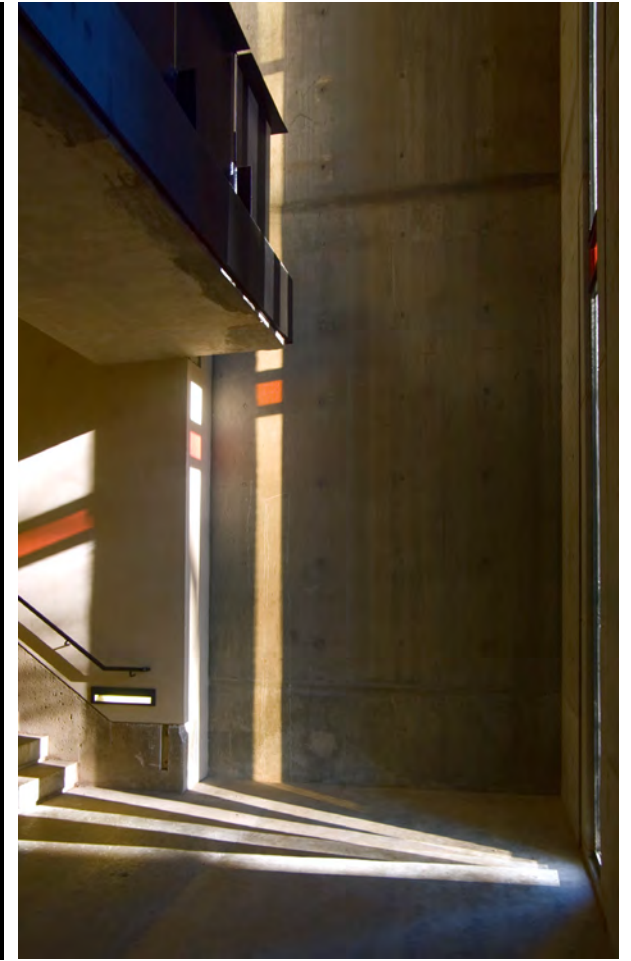
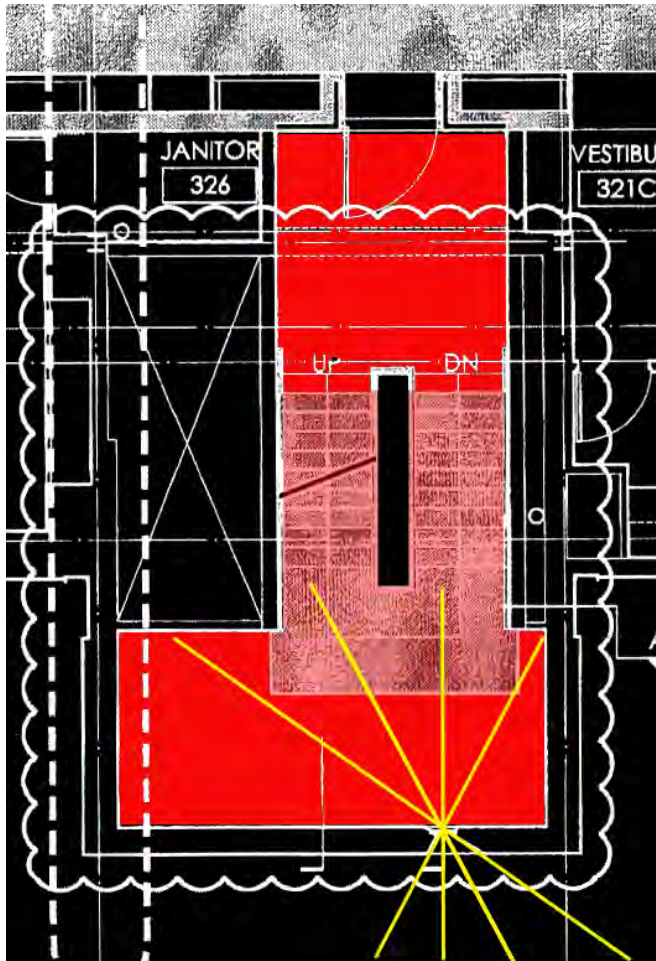
## Connecting to the Climate: The Louvered Wall



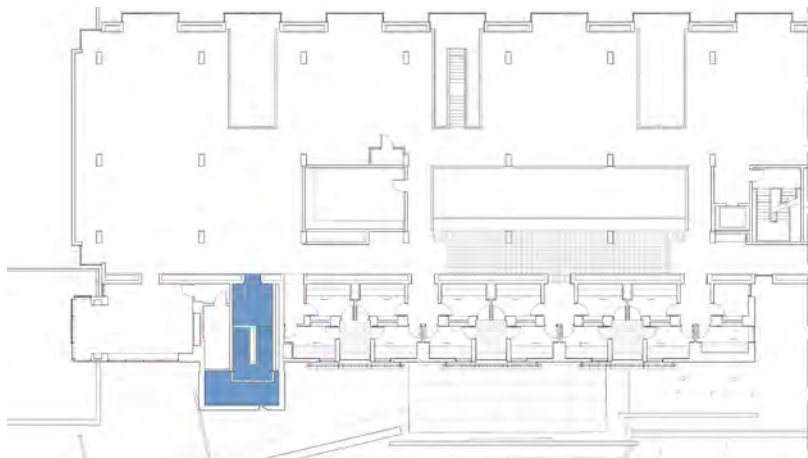


Connecting to the Climate: The Louvered Wall





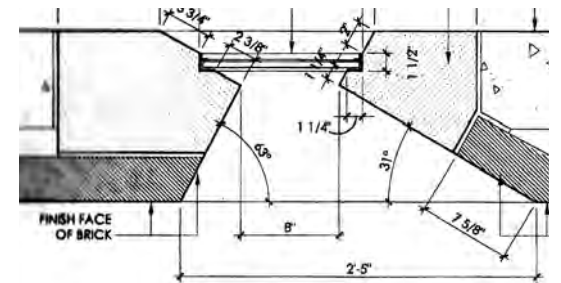
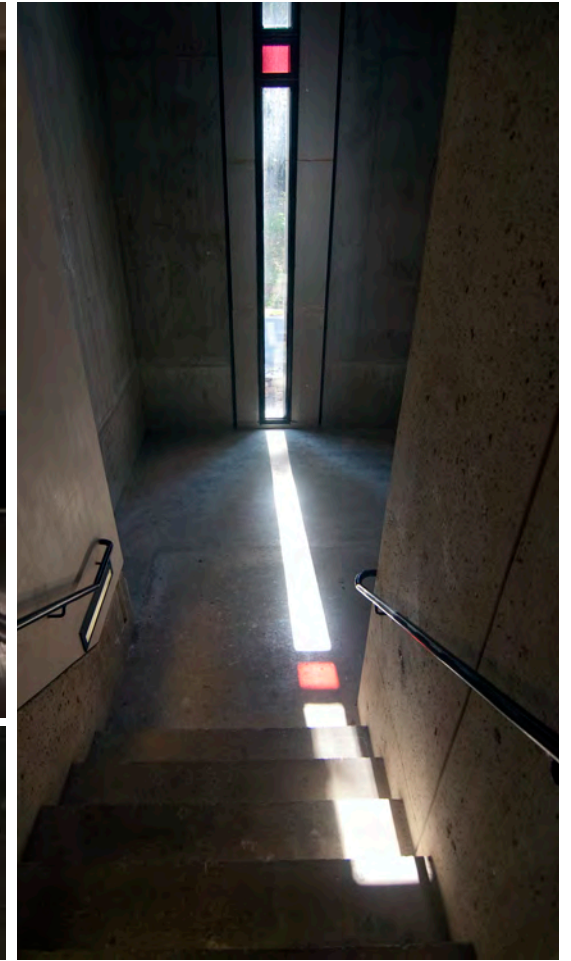
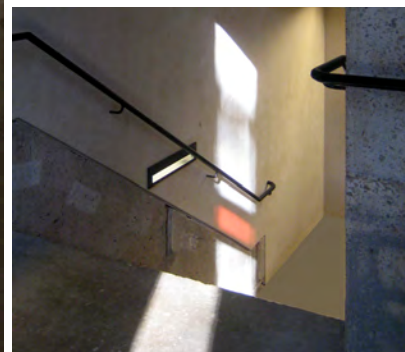
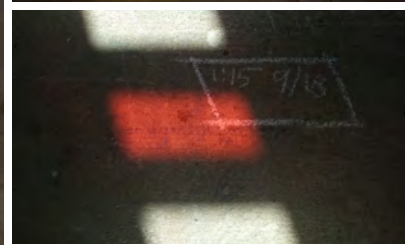
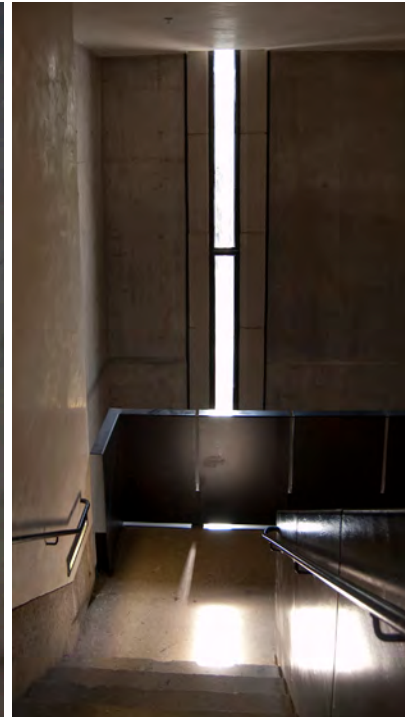
Multiple Exposure Photograph by Kirk Martini



An existing exterior concrete fire stair was enclosed with the brick and concrete tower to link the studios directly to the classrooms and workshops below. The footprint of a mechanical room above allowed the stair to inhabit a primal concrete volume, pierced only by one shaft of light. The red rectangle traces the daily and seasonal path of the sun across the floor, walls, treads and risers. Students mark the date and time of their passage in chalk, gaining an intimate awareness of the geometry of the sun's trajectory through the sky.

## Connecting to the Climate: The Sundial Stair

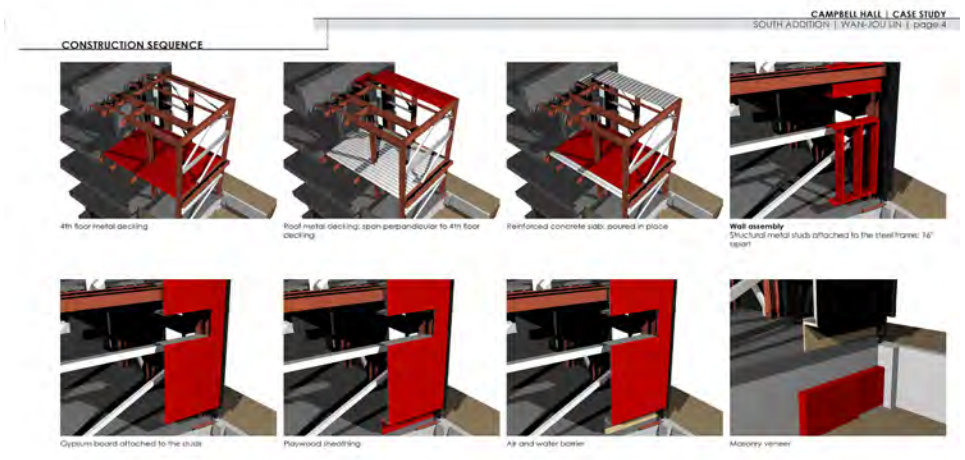
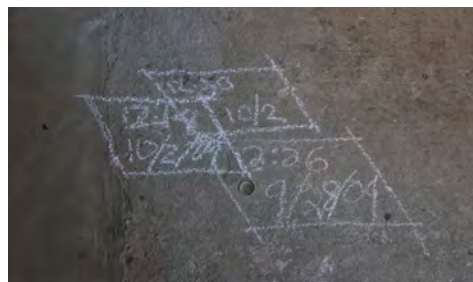
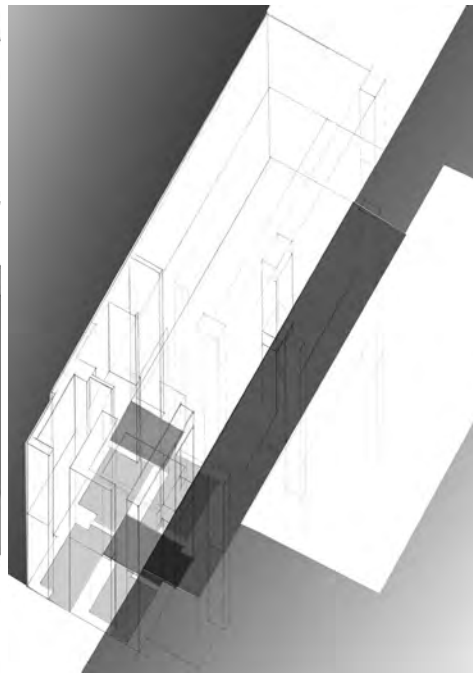
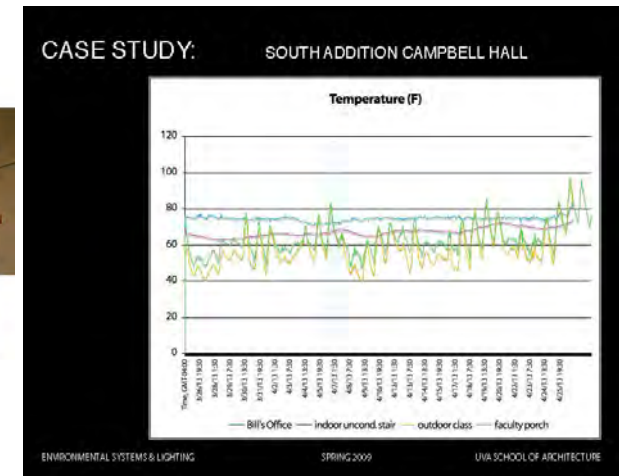
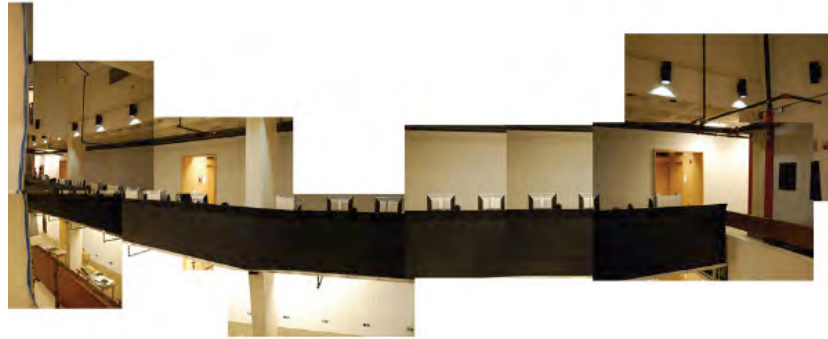
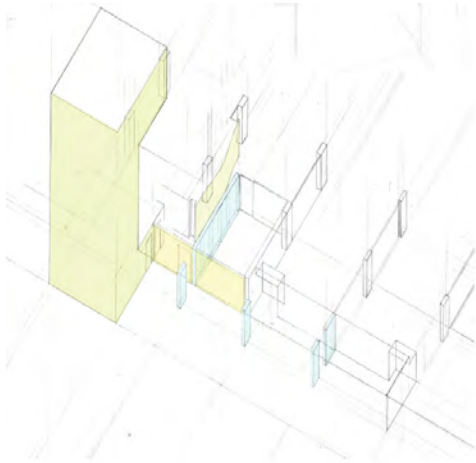




## Connecting to the Climate: The Sundial Stair

Photo: Scott Smith





The South Addition was intended as a teaching tool and it has been used in many capacities, from critical analytic studies in theory classes to monitoring thermal behavior. Examples shown here include traces of the sundial markings for *Systems, Sites and Building* (Sherman), construction analysis for *Construction and Intention* (Quale), representation studies for introductory undergraduate studios (Ponitz et al) and thermal performance logs from graduate *Environmental Systems* (Crowell). On an informal basis, the design enters into many discussions in the studio at the conceptual, formal, detail and systems level.

Connecting to the Curriculum