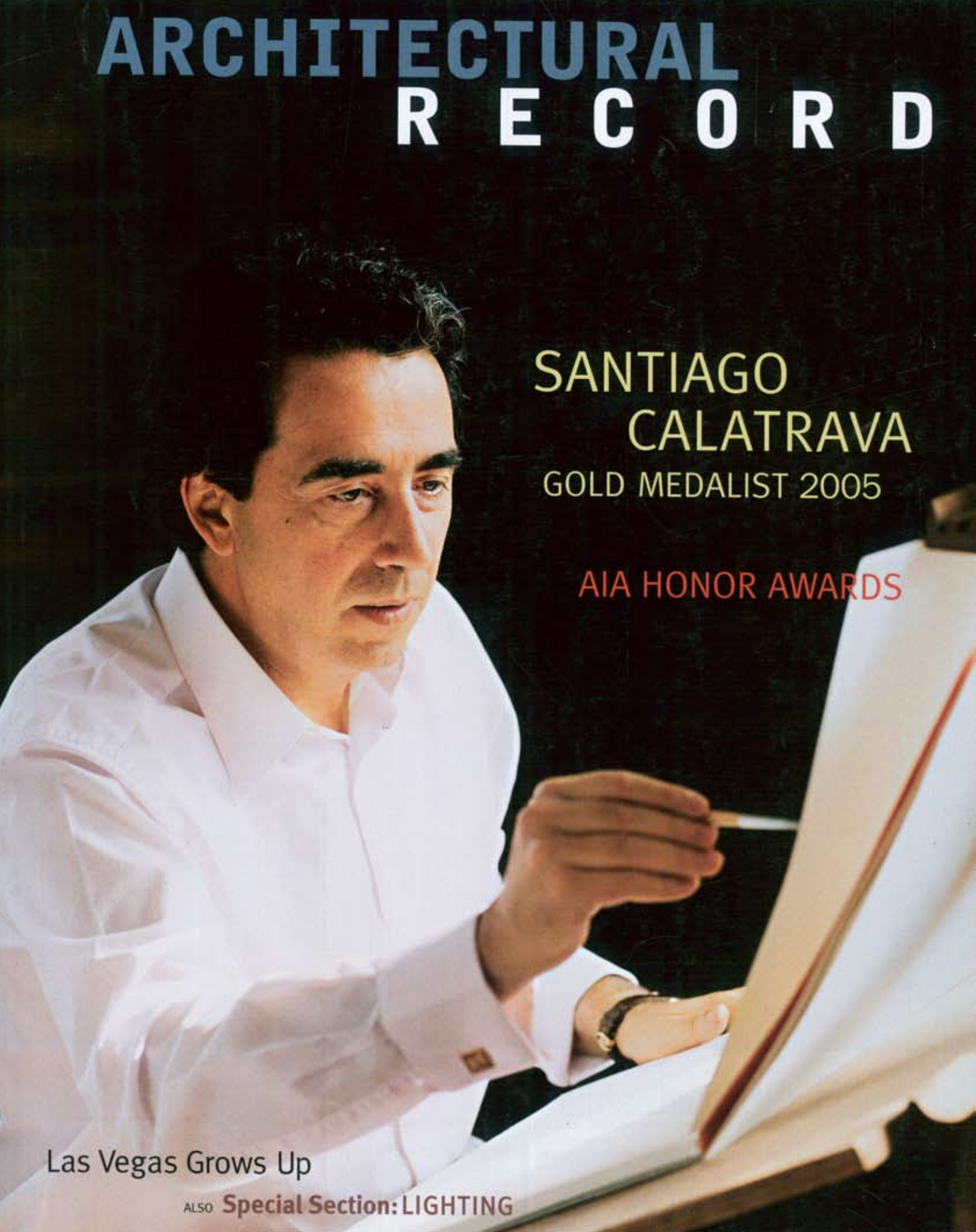
ARCHITECTURAL RECORD



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The marble-shingled skin (below and opposite) gives the building a solid appearance and belies the fact that every space is light-filled with views in all directions.

At Ohio State University, **Mack Scogin Merrill Elam's** new **KNOWLTON HALL** brings the design process to the larger academic community

By Sara Hart

Last fall, the new Knowlton School of Architecture (KSA) at Ohio State University (OSU) opened its doors to 550 undergraduate and graduate students, matriculated in three design fields—architecture, landscape architecture, and city and regional planning. The importance of this event cannot be overstated. The architecture school finally got the state-of-the-art facility that a high-profile, innovative program deserves.

The process was arduous and ambitious. Atlanta-based firm Mack Scogin Merrill Elam Architects survived the short-list judging to win the commission and was then instrumental in selecting Wandel & Schnell Architects (now WSA Studio) as its local collaborators. When the team was assembled, the challenges came into focus. The original budget couldn't accommodate the school's goals. The university initially settled for renovating the existing school and building a major addition, which would bring the three disciplines together for the first time in decades. The architects dutifully obliged with a scheme that worked well enough, but it would have produced merely an expensive compromise that would only be adequate for another 10 or so years.

So they went back to the proverbial drawing board, fortified with more money from the major donor—real estate developer and alumnus Austin E. Knowlton—and designed a 135,000-square-foot structure that consumed the entire site, which was necessary in order to absorb a hefty program—45 studios, 65 offices, computer labs, an archive, a 30,000-volume library, a 200-seat auditorium, and a state-of-the-art model shop with CNC machines for model fabrication.

The site, on the northwestern edge of the old campus, is architecturally eclectic, to say the least. Its most celebrated neighbor is the football stadium. Home to the nationally prominent OSU Buckeyes, it looms large to the west, just beyond its yawning parking lot. Across the other busy avenue to the north, the Fisher Business School occupies an earnest, vaguely Postmodern redbrick complex. Secondary borders are formed by coarse concrete parking garages to the south and low-rise laboratory buildings to the east. This edge is traversed by a major pedestrian thoroughfare that brings students close to the architecture school—a collateral benefit to the overall strategy.

Mack Scogin Merrill Elam approached this project understand-

Project: *The Austin E. Knowlton School of Architecture, Columbus, Ohio*
Client: *The Ohio State University*
Architect: *Mack Scogin Merrill Elam Architects—Mack Scogin, AIA, Merrill Elam, AIA, partners; David Yocum, AIA, project architect; Brian Bell, AIA, John Trefry, Penn Ruderman, Barnum Tiller, Cecila Tham, Jeffrey Collins, Kevin Gotsch, Margaret Fletcher, design team*
Architect of record: *Wandel & Schnell Architects—Robert Wandel, AIA, partner; Cissy Wong, AIA, project architect; Alan Sulser, Ivan Amy, Lannetta Vader, Yanitza Brongers Kristen Poldemann, design team*
Consultants: *Lantz, Jones & Nebraska (structural); HAWA Consulting Engineers (m/e/p); Bird & Bull (civil); Wiss, Janney, Elstner (rain screen)*
Landscape architect: *Michael Van Valkenburgh Associates*
General contractor: *P.J. Dick*

The architecture school (shown in yellow at left) is sited on the northwestern edge of the old campus. This location is dramatically anchored by the OSU Buckeyes' football stadium. The building's logic is revealed by circumnavigation. The architects carved slots out of the mass to bring in natural light and create outdoor spaces. The major donor gave five enormous Classical columns to weigh heavily on one of the public spaces (right and opposite).

ing that the OSU architecture school had a mission beyond giving form to a well-respected architecture program. Robert Livesey, director of the school, wanted an open atmosphere with spaces, including the auditorium, available for use by other programs within the university. Most architecture schools don't invite the casual visitor into their cloistered confines. Unlike other disciplines, architecture generally offers instruction via the studio system—a vibrant, stressful construct that is disorderly without being disorganized. Knowlton Hall was intentionally conceived to flaunt that distinction, while simultaneously and purposefully creating a transparent environment in which the design process was constantly on view. "We wanted to make the building a model for the Knowlton School students and the university," explains Livesey. "We wanted to show them the impact that architecture could have."

Principal Mack Scogin admits that he packed the section. As a matter of fact, the plan, by contrast, is deceptively ordinary—orthogonal and judicious. Form and function collide in the section. The primary, ceremonial procession through the building follows gently inclined ramps. It offers views in multiple directions, which appear and disappear along the way through translucent layers or openings in the unfinished poured-in-place concrete walls and floors. Discrete spaces are formed, not so much by walls, but by solids and voids, level changes, staircases and columns, and ascending and descending ceilings. Each space is illuminated from multiple sources—skylights, clerestory windows, spotlights, and custom fluorescent light boxes.

One is tempted to invoke Piranesi when describing such complexity, but this comparison, if taken literally, suggests disorientation. Nothing could be farther from the truth. Knowlton Hall is a lucid building. The architects focused on slicing and shearing the longitudinal section until the spaces resonated. This is what Scogin calls the "critical imperative." He acknowledges that they resisted any inclination to create an iconic object—one that might separate the architecture school stylistically from the rest of the campus, but perhaps forfeit its potential to inspire from within.

And yet, there is a another reason why the architects turned inward. Rare is the commission that doesn't include odd requirements. In the case of the KSA project, the architects had to address the major donor's insistence on white marble cladding. Despite its association with permanence, marble is not a durable material, especially when applied as a thin veneer. It requires a lot of maintenance due to its susceptibility to environmental degradation. The architects offered several alternatives, but the donor remained adamant regarding the marble, even though there was no such precedent on the OSU campus. The solution was ingenious. The building is protected, hidden actually, by a rain screen, which is independent of the curtain wall that actually defines the envelope. The screen is composed of marble shingles beveled so they overlap and clip together without any caulked joints. In the event of breakage, a shingle can be easily replaced. The overall effect is an illusion of impenetrability, when the truth is just the opposite.

The university elected Michael Van Valkenburgh to landscape the perimeter. However, since the building absorbed most of the site, there was little left to landscape. "Michael had to grab the edges of the site," explains Scogin. Indeed, Van Valkenburgh took what land was available and com-

1. *Planning studios*
2. *Auditorium*
3. *Faculty offices*
4. *South court*
5. *Gallery*
6. *Roof garden*
7. *Studios*

SECTION A-A

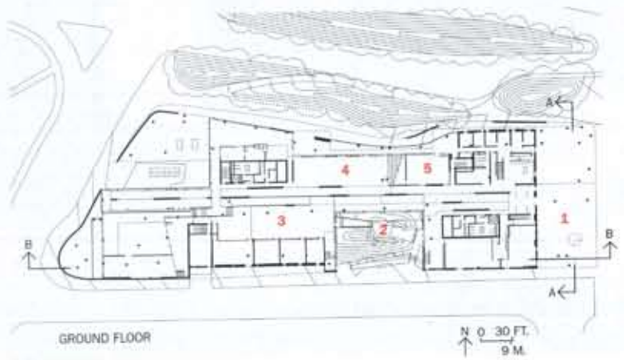
SECTION B-B

The largest of the many slots that penetrate the building encloses the south court on three sides (opposite). While dramatic, the curtain wall is in reality an inexpensive storefront system. Studios occupy a variety of spaces with views up and down into other studios, while light trickles in from all directions (right).

A strut supporting lighting (left and opposite, bottom) runs diagonally on the first level, linking the jury spaces on the south to those on the north (achieving in plan what the ramps do in section). It also follows one of the diagonal lines of the structural columns. The library (opposite, top) is a two-story volume with a mezzanine that can be reached either from the lower level or across bridges.

1. *Forecourt*
2. *South court*
3. *Jury space and lecture rooms*
4. *Center space*
5. *Gallery*
6. *Faculty offices*
7. *Auditorium*
8. *Jury space*
9. *Computer labs*
10. *Planning studios*

SECOND FLOOR



GROUND FLOOR

FOURTH FLOOR

posed a prelude to the internal experience with berms and ramps, which stand in elegant contrast to the flat hardscape of neighboring buildings. Within the exterior slots created by the building, ramps turn and rise from the sidewalk until they reach the entrance.

As commissions for building types go, the design of a high-profile, multitasking architecture school must be the most intimidating assignment for an architect, whose name will be forever attached to it. There are several architecture schools in the U.S. with impressive pedigrees, and even they aren't immune from persistent criticism. After all, the designer may have a single client, but he or she has as many critics as there are students and professors in residence. Knowlton Hall should raise the bar for architecture and campus development for the next generation. At the end of the day, it's the students who benefit most, and that's the true mark of success. ■

Sources
Rain screen: *Vermont marble*
Metal-and-glass curtain wall: *YKK and Centria*
Built-up coal tar roofing: *Kalreuth Roofing & Sheetmetal*
Posttensioning: *P.T. Systems*
Glazing: *PPG Solarban 60*
Skylights: *Naturalite Skylight Systems*
Elevators: *Thyssenkrupp Elevator*

For more information on this project, go to Projects at **www.architecturalrecord.com.**