

## Georgia Tech Completes \$9.5 Million Rehabilitation of University's First Research Building for the College of Architecture

*Major project exemplifies innovative architecture, preserves legacy of Bauhaus-influenced functionalism*

ATLANTA (Dec. 14, 2010)—Georgia Tech's College of Architecture will unveil the \$9.5 million restoration, rehabilitation and adaptive reuse of the historic Hinman Research Building at a grand opening event January 12, 2011. Designed in 1939 by P.M. Heffernan, architect and later director of the Tech School of Architecture (1956-1976), the 35,000-square-foot building has been artfully preserved and revitalized in collaboration between Lord, Aeck & Sargent's Historic Preservation Studio and Office dA as the architects and The Beck Group as construction manager.

The Hinman Building, the first freestanding research facility on the campus, is characterized by its mid-century design and materials, as well as a 50-foot high-bay laboratory. It originally housed the Georgia Tech Engineering Experiment Station, the predecessor to the Georgia Tech Research Institute. The newly rehabilitated space includes graduate level architecture studios, computer labs, interdisciplinary research labs, high-fidelity simulation and planning labs, administrative offices, galleries and space for large-scale events.

"Hinman is the perfect union of the past, present and future of architectural research and education at Georgia Tech," said Alan Balfour, dean of the College of Architecture. "Certainly our students will benefit from a learning environment built with the very best practices in confident yet responsible design, interdisciplinary collaboration, and the most advanced construction technologies available."

"Thoughtful conservation of the original materials and important interior and exterior features has preserved the integrity and legacy of Heffernan's Bauhaus-influenced functionalism. In addition, the original concrete and steel construction was retrofitted to a LEED Gold standard of sustainability," said Jack Pyburn, FAIA, Lord, Aeck & Sargent's principal in charge of the project.

The Hinman Building's interior was reconceived within the context of architecturally and historically significant features to accommodate future programmatic needs of the College of Architecture, and to didactically communicate the relationship between the past and future of architectural education at Georgia Tech.

With a radically limited budget, the idea was to redefine flexibility by differentiating the various events on the ground from functions up in the air. The ground is thought of as an expansive flat field where a variety of spatial organizations may be permitted—as a drafting hall, a ground for large-scale installations, an auditorium, a critique room or a hall for the Beaux Arts Ball. In turn, the section of the building brings the ground to life by hanging the most important attributes of the space aloft:

- The high-bay space features a historic crane from which a dramatic new mezzanine is hung, re-purposing the crane and expanding the usage of the building by 3,000 square feet. A new monumental stair connects the mezzanine and the floor of the high bay to facilitate communication within the building.
- A new spiral staircase enclosed in a sock of expanded cable mesh provides access to faculty offices in the building's upper floor, activating the building's southern wing.
- A matrix of custom-designed retractable pendant lights allows the high bay to adapt for film screenings, large-scale model building and other programmatic activities.
- A 40-foot-wide guillotine door, suspended from above, provides added pinup space for reviews and exhibitions when closed, and when raised reveals a large formal critique space that can double as a gallery.

“The relationship of the new elements within the high-bay and historic framework is calibrated carefully: neither in mere subservience, nor in disrespect, but rather in a productive tension, the new giving added meaning to the old,” said lead designer Nader Tehrani.

The Building Information Modeling (BIM) successfully used on this historic preservation adaptive reuse project exemplifies the high degree of collaboration between the architectural team and the construction manager. The Beck Group converted the architect’s BIM model to a construction-level BIM model that incorporated laser scans of the space to seamlessly achieve the project design within the construction budget and schedule. In addition, Beck created intelligent models to support the design, fabrication and installation of architectural millwork. At the completion of the project Beck will provide a complete model of the building including facility management functionality, enabling Georgia Tech to monitor the building’s performance over its life cycle.

“This challenging project enabled us to demonstrate our advanced BIM skills to add value to the construction process, the owner and ultimately future students,” said Fred Perpall, AIA, managing director of the Eastern Division of The Beck Group.

The project was spurred by soaring growth in graduate architectural studies and research activity in the College of Architecture over the last two decades. Funding came largely from the State of Georgia when, in May 2008, Georgia Governor Sonny Perdue signed into law a \$6.4 million appropriation for the renovation. Remaining costs were covered in partnership with the Georgia Tech Office of the President, but private support is crucial to completing the project so that it is optimally used.

The grand opening event is on Wednesday, Jan. 12, 2011, beginning at 4:00 pm with a lecture by the architects and followed by a ceremony and reception at 5:00 pm. The event is free and open to the public, and guests will have a chance to tour the building, meet the architectural and construction team and view an exhibition detailing the advanced technology used in the design and construction process.

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#### **About the Georgia Tech College of Architecture**

The College of Architecture at Georgia Tech has been a leader in design innovation since 1908. Students, faculty and researchers in the Schools of Architecture, Building Construction, City and Regional Planning, Industrial Design and Music work across boundaries to advance knowledge of designed environments at all scales, producing new realms of experience and creativity. The College of Architecture applies cutting-edge research in partnership with corporate, government and nonprofit agencies through the Center for Assistive Technology and Environmental Access (CATEA), the Center for Geographic Information Systems (CGIS), the Georgia Tech Center for Music Technology (GTCMT), the Center for Quality Growth and Regional Development (CQGRD) and the Digital Building Lab (DBL). For more information, visit [www.coa.gatech.edu](http://www.coa.gatech.edu).

#### **About Lord, Aeck & Sargent**

Lord, Aeck & Sargent is an award-winning architectural firm serving clients in scientific, academic, historic preservation, arts and cultural, and multi-family housing and mixed-use markets. Its Historic Preservation Studio has a national reputation for quality and champions collaboration between preservation and design. The firm’s core values are responsive design, technological expertise and exceptional service. In 2003, The Construction Specifications Institute awarded Lord, Aeck & Sargent its Environmental Sensitivity Award for showing exceptional devotion to the use of sustainable and environmentally friendly materials, and for striving to create functional, sensitive and healthy buildings for clients. In 2007, Lord, Aeck & Sargent was one of the first architecture firms to adopt [The 2030 Challenge](#), an initiative whose ultimate goal is the design of

carbon-neutral buildings, or buildings that use no fossil-fuel greenhouse gas-emitting energy to operate, by the year 2030. Lord, Aeck & Sargent has offices in Ann Arbor, Michigan; Atlanta, Georgia; and Chapel Hill, North Carolina. For more information, visit the firm at [www.lordaecksargent.com](http://www.lordaecksargent.com).

#### **About office dA**

Office dA is a Boston-based design firm led by principal partners Nader Tehrani and Monica Ponce de Leon. The firm's work ranges in scale from furniture to architecture, urban design and infrastructure, with a focus on craft, detailing, and precision. Office dA seizes on the challenges unique to each project—the peculiarities of a site, requirements of program, and cultural specifications—as the catalysts for transformation in architecture. An investigation of the potentials of materials and construction techniques, sometimes imported from fields outside of architecture, is the foundation for every design. Much of the firm's research is dedicated to an exploration of how to improve on contemporary modes of construction, investigating both industry standards as well evolving technologies derived from digital manufacturing processes. The firm's focus on detailing, materials, and technology has established a unique design process that encourages architectural invention and the production of knowledge.

#### **About Nader Tehrani**

Nader Tehrani is a Professor of Architecture and the Head of the School of Architecture at Massachusetts Institute of Technology. Tehrani received a B.F.A. and a B. Arch from the Rhode Island School of Design in 1985 and 1986 respectively, and continued on to the Harvard Graduate School of Design where he received his M.A.U.D in 1991. Tehrani has taught at the Harvard Graduate School of Design, Rhode Island School of Design, and Georgia Institute of Technology, where he served as the Thomas W. Ventulett III Distinguished Chair in Architectural Design. His area of research is focused on innovations in building systems, material application, and the transformation of the building industry, with an emphasis on digital fabrication. His practice at Office dA has received numerous awards, including the Cooper-Hewitt National Design Award in Architecture, the American Academy of Arts and Letters Architecture Award, the Harleston Parker Award, and 13 Progressive Architecture Awards. The work of Office dA has been exhibited widely, including such venues as the Museum of Modern Art, the Venice Biennale and the Institute of Contemporary Art in Boston.

#### **About The Beck Group**

Founded in 1912, Beck is a full-service design and construction company with its' Eastern Division headquarters being located in Atlanta since 1939. Beck is in the business of devising solutions for clients needs through the development of real estate, the design of architecture and interiors and the construction of buildings. In addition to greenfield developments, Beck has become a leader in complex renovation and building re-use projects. Beck serves a wide range of industries in the private and public sectors, including arts, corporate, healthcare, entertainment, religious, higher education, retail, and hospitality. Beck has more than 500 employees, many of whom are LEED-accredited professionals, working from a network of offices in Atlanta, Austin, Dallas, Denver, Fort Worth, Mexico City, San Antonio and Tampa. For more information, go to [www.beckgroup.com](http://www.beckgroup.com)