

## Creating Innovative Performance Spaces that Enhance Your Environment

Strang, Inc., a historic perspective

*By Bruce Kimball, PE, January 2006*

In 1935, Hamilton Beatty and Allen Strang founded the Beatty and Strang architectural firm on the corner of State Street and North Carroll in downtown Madison. The partners specialized in the progressive design of small, International Style houses with simple concrete, stucco, brick or frame; large expanses of glass; and flat roofs. Additional notable Beatty and Strang structures are scattered throughout the Madison area.

Strang's first commission was the design of a residence located in Frost's Woods. Twelve of these homes were designated historic landmarks by the City of Monona. Throughout the 70 years that have passed, Strang evolved into a 42-person architecture, engineering and interior design firm characterized by an emphasis on innovative design, uncompromising professional ethics, commitment to client service, and thoughtful leadership style. The firm has provided creative design solutions for thousands of office buildings, churches, schools, post offices, university buildings and scientific facilities throughout the Midwest. Technology and business practices changed significantly since Strang's beginnings. The firm's practice evolved to meet those changes.

Just prior to World War II, Beatty and Strang parted ways, Beatty to design factories for the Austin Company in Detroit, and Strang to work with the Federal Housing Authority in Chicago. Eventually, Strang returned to Madison and joined Joe Weiler to form the firm of Weiler & Strang. Joe Weiler served as an Architect/Engineer at the Badger Ammunition Plant in Baraboo during the war. Successor firms include Weiler, Strang & McMullin, Strang Partners, and currently, Strang, Inc. In the post-war era between 1945 and 1955, the firm began to design secondary and post-secondary schools, churches, and office buildings to accommodate the rapidly growing space needs of organizations such as the American Dairy Association and American Bar Center. Other notable projects from this period include Mendota Elementary School, Columbus Elementary School, and Our Lady Queen of Peace Church. Joe Weiler designed many of the mechanical, electrical, and plumbing systems for the firm during this time period.

In the decade between 1955 and 1965, the firm grew to 15 employees, added additional mechanical engineering capabilities, and established its long-standing working relationship with the State of Wisconsin. This collaboration's first designs included the Engineering and Science Facility (now known as Upham Hall), and Ottensman Hall at the University of Wisconsin-Whitewater, and University of Wisconsin-Platteville respectively.

It was also during this period that the firm began specializing in building designs with highly complex architectural and mechanical requirements. In 1964, Weiler & Strang designed the Numerical Analysis and Statistics Building for the University, which was the first academic computer facility in the country. The HVAC design included central cooling for the large main frame computers using raised-floor air distribution design. This relationship with the State continued with additions to the NAS (now called Computer Science) in the 1970's and 1980's. The third phase of construction included the first use of DDC controls in a University of Wisconsin campus facility. It was an emotionally charged issue for a maintenance staff that was familiar with pneumatic controls and leery of the new DDC technology.



In the late 1960's, the firm, Weiler, Strang & McMullin, included healthcare facility design among its offerings. Their portfolio included projects at Reedsburg Hospital, Ashland Hospital, and an expansion for Madison General Hospital (currently Meriter Park). The Madison General project included a heat recovery wheel, approximately 9' in diameter, and was the first large wheel of its kind in the Madison area.

When developing the new grade school for the Village of McFarland, the firm incorporated a revolutionary new design principle of "classrooms without walls." Today, this concept is widely applied through open space planning for corporate offices. The McFarland school was the first in the area to use gas fired rooftop units (due, in part, to a vendor being a member of the community). Other projects included the Gordon Wilson elementary school in Baraboo, and Hugel elementary in Madison. The Hugel project utilized a unit

ventilator system. Other notable projects throughout this decade include State Medical Society, Wisconsin Life (now Humana), the City of Madison Downtown Public Library, and The Regent. Strang's relationship with Forest Products laboratory began at this time, and represented the company's first large scale involvement with private laboratories.

1970's commissions included extensive work for the State of Wisconsin, such as Union South and Wendt Library for the University of Wisconsin-Madison. The firm began designing larger office facilities for companies such as General Casualty Insurance, as well as structures for high-tech clients, including Ohio Medical (now GE Healthcare).



One of Strang's pivotal projects was the 1983 renovation of Birge Hall for the University of Wisconsin-Madison. This project, which involved laboratories and classrooms, helped solidify Strang as a leader within the private biotechnology industry. A short while after the project was completed, Promega commissioned Strang to design its new headquarters facility in support of molecular biological research and development. Strang also designed the BioPharmaceutical Technology Center for Promega, and began a long term relationship with Hazelton (now Covance Laboratories). The first major project with Covance included a BETA test of the newly created Metasys DDC control system by Johnson Controls Inc.

Even before the LEED® rating system was established, Strang had shown a strong history of, and a continued commitment to, energy

efficient and cost effective design. In the early/mid 1970's, the firm was commissioned to do many energy retrofits to existing schools and hospitals. In 1978, Strang was chosen, along with a couple dozen firms throughout the United States, to think "outside of the box". The challenge was to minimize energy consumption on a project that had been recently designed without this issue being a major design parameter. The project was sponsored by the AIA, along with the federal Energy Department. The redesigned project included passive solar, optimum site orientation, natural day-lighting, etc. In 1982, the firm designed one of the area's first wet solar systems to assist in the heating of the water-source heat pump loop for the Bassett Warehouse apartments, a multi-unit residential complex that had been designed years earlier.

In the past decade, Strang has focused its design expertise on highly complex structures, such as research and development, pharmaceutical manufacturing, biotechnology, electronic, telecommunication and corporate office facilities. The firm has designed, or is designing, facilities for some of Dane County's premiere high-tech organizations, including Mentor, MGE Innovation Center, Electronic Theatre Controls, GE Lunar Corporation, Tetronics, Third Wave Technologies, Bruker AXS, Focused Research, and Powderject.



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