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Architect:

Gabor Lorant Architects, Inc.
Phoenix, AZ

Building Location:

2626 East Pecos Road
Chandler, AZ

The Vision

Chandler-Gilbert Community College Williams Campus

Chandler-Gilbert Community College, Mesa, Arizona, serves more than 16,000 students at three different locations in the Southeast Valley of the Phoenix metropolitan area.

The 753-acre Williams Campus was originally created from a portion of the former Williams Air Force Base and is in close proximity to Phoenix-Mesa Gateway Airport. In December, 2008, the college completed construction of Engel Hall, a spectacular new 20,778 square-foot nursing classroom and faculty office building and 6,000 square-foot covered outdoor plaza on the Williams Campus. The first floor of the facility houses student classrooms, laboratory spaces and lounge areas; the second floor houses faculty offices.

Engel Hall was developed as part of the Williams Education Research and Training Master Plan and with an administration directive to provide the college with a new standard of design and architectural materials for future expansion projects across the campus. Achieving maximum energy efficiency and indoor air comfort by minimizing the impact of the hot Arizona sun and a minimum LEED Gold Certification were key requirements of this project. Materials and products employed in the facility were selected based on their insulative value, their durability under extreme regional weather conditions, their visual and textural intrigue, their recycled content and their regional availability.

The Airlite Look...

Architects positioned Engel Hall's building footprint and created exterior facades to establish a revitalized street presence to the adjacent avenue. The building's low-profile and sleek lines are visually integrated with the expansive horizon that surrounds the campus. Engel Hall's engaging but understated exterior immediately projects a progressive, contemporary image for the college and helps support the Master Plan's recommendation to create new space that "represents the place of this institution in its community."

A sweeping veil of Airlite sun controls spans the entire length and height of Engel Hall's second floor providing a very distinctive, visual intrigue to the building during daylight hours and a stunning presence when backlit from the interior at night. The stylish second floor wall of Airlite sun controls also provides a dramatic framed view of the Superstition Mountains for visitors standing in the outdoor plaza where graduation ceremonies, concerts, trade fairs and other campus events will be held. The sun controls' Kynar 500® Pearlescent Warm Silver finish matches the adjacent storefront and ceiling systems.



That Works

Vital shading provided by the sun controls contribute to energy-efficient cooling and desired thermal comfort for faculty offices without obstructing interior views of the surrounding campus.

Six-inch Airlite airfoil blades form the continuous length and height of the second floor. Blades are arrayed horizontally at 6 inches on center with a solar orientation of 30 degrees and were delivered to the site in approximately 10 feet wide x 6 feet high factory-assembled sections. Each sun control section is secured to steel trusses which also support the overhanging second floor. In addition, the flexibility of the Airlite sun controls relative to solar orientation helped with the user's thermal comfort, and their recycled material content helped in achieving LEED Gold Certification.

Airlite's sun controls provided shade for the faculty offices, which in turn created a more pleasing visual environment and a more comfortable thermal environment for the users. The sun controls helped contribute to reduced solar heat gain which resulted in reduced cooling and energy consumption. "Airlite's architectural louvers provided a design element that subtly and successfully addressed the functional needs of the users, energy efficiency requirements of the building, and our own aesthetic goals as a design firm," stated Paul Goldammer, project manager for Gabor Lorant Architects, Inc.

