



ADVANCED TECHNOLOGY CENTER

VICTORVILLE, CALIFORNIA

ARCHITECT:

NTD Architecture

955 Overland Court, Suite 100
San Dimas, CA 91773

Jay R. Tittle, AIA
Partner

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Project Architect

STRUCTURAL ENGINEER:

TMAD/Taylor Gaines

GENERAL CONTRACTOR:

Cal K-12

MASONRY CONTRACTOR:

Nibbelink Masonry Construction Corporation

BLOCK PRODUCER:

Angelus Block Company, Inc.

OWNER:

Victor Valley College

Architect's Commentary: The Advanced Technology Center (ATC) embodies Victor Valley College's mission by inspiring innovative teaching and service with imaginative uses of collaboration and technology, fostering vibrant programs that are measurably effective in addressing student learning and community needs. The College was in need of a centralized computer laboratory center that developed a strong relationship between synchronous learning and asynchronous learning through the use of technology and close proximity to instructional resources. This multifunctional and developmental learning is achieved through accessibility, versatility and flexibility, and sustainability.

The ATC serves as the hub of computer related training activities and also brings together multiple computer and high-tech lab facilities in an open and unique learning environment. The Technology Center is organized around

a central, open linear "mall" concept and is also juxtaposed in between two existing hexagonal buildings. There are two controlled points of entry and two control stations that all students must pass by upon entering or exiting the building.

The use of concrete block masonry was an important design element for this project to match the other existing campus buildings and was a very efficient use of structural shear walls. The mixture of scored precision blocks with the split-faced blocks arranged in strong horizontal bands created visual character and helped to break up the mass of the building. Selection of block was also a factor for durability in the high pedestrian traffic locations of this center. Interior block walls were used throughout to provide excellent high thermal mass due to the diurnal temperature swings in the dry high desert environment. Colored bands of block were used and coordinated as design features around windows and to align with the storefront window mullions. Modules of the concrete block were carefully aligned with the curved glass blocks to create strong contrast between translucent glass and solid walls.

Sustainability features were an essential element in the construction and design of the Center. A bank of clerestory windows on both sides of the center allow in large amounts of daylight. Deep roof overhangs eliminate direct sunlight and are angled to allow the more desired reflected diffused daylight to enter the space and minimize glare on computer screens.

Another sustainable design element is the connection of the ATC to the existing college central cooling and heating plant. This connection made for a more economic and energy efficient solution for the heating and cooling of the building.

Additional sustainable design features include the use of air lock entrances and automatic revolving door to help maintain interior temperatures and eliminate wind gust during periods of high wind. Cool white reflective roof coating was used on the flat roofs to reflect heat and minimize the "heat island effect".



Photography: Anthony O'Keefe, AIA, NTD Architecture