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Architect’s Commentary: The project consists of three buildings on a sloping wooded site. Critical to the success of the project was creating a design in keeping with the CHP's mission statement. To that end, the facility reaches out to the public with a warm, inviting aesthetic, while meeting the state’s security and functional needs. The design focused on the use of materials and systems that could deliver long lasting value to the developer, State and ultimately the taxpayers. Examples of this are the use of concrete block walls, polished concrete floors, exterior metals with high performance coatings, photovoltaic power generation and a water recycling car wash.

Why Masonry? The experience of block in this project is unique from any other block building. Custom block, created and designed by the architect and manufacturer, melded two old world architectural techniques into a totally new contemporary aesthetic. The end result is a success in performance and experience that embodies the goals of the California Highway Patrol and thrives in the rural feel of the neighborhood.

From the project inception, the design team wanted to honor and emulate the core values of the CHP in the architectural experience and performance of the building: safety, service and security. Masonry quickly rose to the top of the options for structural, aesthetic, and project specific reasons. It provides security and unbeatable durability and near zero maintenance. Block provided immediate value to the project and also helped mitigate project specific challenges posed by the wild fire risks of a forest environment, which made noncombustible buildings a must have. In the original program, exterior lap siding fiber cement boards were recommended to connect with the vernacular of the community. The old world aesthetic of lap siding became the inspiration for the custom block shape. A sloped front face with flush horizontal joints and a rich charcoal color synthesized the visual comfort of lap siding with the sense of commitment and stability that masonry creates.

The design team meticulously applied the lap aesthetic in a contemporary style, playing on contrast and complements with other smooth or horizontal patterned materials, creating a harmonious composition that has its feet in both the past and the future: tradition and innovation. This building truly lives in its context and embodies the brand and values of the California Highway Patrol.

The project was awarded a LEED® Silver Certification.
ARCHITECT’S COMMENTARY: The College of Business Administration comprises nearly one quarter of the student body at Cal Poly Pomona and had long outgrown its facilities housing classrooms across campus in different buildings. This new, LEED® Silver certified facility, consists of three separate buildings, totaling 75,000 gross square-feet and designed to meet the needs of the rapidly expanding college.

The Faculty and Student Services Building is the largest building of the three buildings and holds faculty offices, administrative offices and meeting/conference room facilities. The Classroom Building holds modern classrooms in a variety of styles with the latest instructional technology including: five, 70-seat, tiered classrooms; seven flat classrooms; two active learning classrooms; and multiple breakout rooms in a two-story structure. Finally, the Auditorium Building houses a 200-seat auditorium, as well as a 121-seat auditorium in a single-story structure.

WHY MASONRY? The complex is a cluster of complementary structures, bound together by a dynamic ‘folding’ roof canopy. This concept was driven by the college’s desire to have a branded identity related to the physical aesthetic of their new facility. The design originated from an abstraction of the layered rolling hills directly behind the structure to the north. The materials: copper, wood and painted metal give warmth to the neutral palette of the other structures and work well with the native landscape and surrounding site. The red cinder within the concrete masonry units (CMUs) contributes to the warm color palette of the project and reflects the color of the copper panels of the roof as well as the stair guardrails.

Using the concrete masonry units as the load bearing structure allowed for the material to provide the required structural shear for the trusses and made it possible to eliminate the otherwise necessary cross bracing. The durable burnished CMUs with red cinder are both the finish and supporting structure in one monolithic material. The integrated water repellant of the CMUs in combination with the water repellant mortar achieves a high quality finish appearance, while minimizing the effects of efflorescence, common in other concrete masonry projects.

ARCHITECT: AC Martin
444 South Flower Street, Suite 1200
Los Angeles, CA 90071

Robert Murrin, FAIA, LEED® AP
Principal-in-Charge

STRUCTURAL ENGINEER: KPFF Consulting Engineers, Pasadena

GENERAL CONTRACTOR: C.W. Driver

MASONRY CONTRACTOR: NuWay, Inc.

BLOCK PRODUCERS: ORCO Block & Hardscape

OWNER: Chancellor of the California State University

PHOTOGRAPHY: Lane Barden Photography - top photo
Tom Bonner Photograph - lower two photos
Palo Verde Elementary School Multi-Purpose Building
Tulare, California

ARCHITECT:
DKJ Architects, Inc.
1736 S. Central Street, Suite A
Visalia, CA 93277

Douglas K. Janzen, RA
Principal-in-Charge

STRUCTURAL ENGINEER:
Parrish Hansen Incorporated

GENERAL CONTRACTOR:
Bush Construction

MASONRY CONTRACTOR:
McCurley and Day Masonry, Inc.

BLOCK PRODUCER:
Basalite Concrete Products, LLC

OWNER:
Palo Verde Union Elementary School District

© PHOTOGRAPHY:
Dustin Hutsell, DKJ Architects, Inc.

ARCHITECT’S COMMENTARY: Architect, Douglas K. Janzen, of DKJ Architects, Inc., Visalia, California was commissioned by the Palo Verde Union School District to design a state-of-the-art Multipurpose Building, which would include a gymnasium/dining/assembly with a performing arts stage along with a full kitchen and restrooms.

Located in the Western Tulare farming community with a history dating back to 1949, it was important to the School Board that the design of the new facilities be sensitive to the existing buildings on campus, a number of which include a brick veneer finish. It was stressed by the owner that the brick finish should be respected in the design of the new facilities.

WHY MASONRY? Wanting to take advantage of the economies in the use of masonry construction and working closely with the local representative of Basalite Concrete Products of Selma, California, the architect chose a concrete masonry unit with a finish very close to that of the existing brick on campus. Spec-Brik® in Concrete Products Group’s Stanton Blend was paired with Basalite Concrete Products’ precision concrete masonry units (CMUs) in their S515B finish, matching the existing school colors. With the use of these masonry products, as well as the overall shape, trim colors and appearance of the building, the architect was successful in providing the fusion of the old and new in such a manner as to meet the desire of the client to have a modern facility that respects the heritage of the school.

The architect was also able to leverage the efficiency and sustainability aspects of concrete masonry unit construction to exceed Title 24 requirements for the gymnasium by over 18%, which in turn contributed to achieving 41 points in the DSA High Performance Incentive program, earning the school district significant additional grant funding.
Architect’s Commentary: The Montgomery Middle School Gymnasium was built to reflect four core values, Honesty, Compassion, Respect and Responsibility. The building is honest, not flashy. It represents the intended purpose as a sporting and assembly space for the community. It is compassionate, as it creates a gathering space for students, faculty and community to connect. By being both safe and sustainable, the new gym respects the environment, staff and students that will use it. Lastly, the building is responsible to the community by fitting with the local aesthetics and striving to conserve energy.

Our aim was to create a brightly lit and inspiring space, meant to be uplifting and raise spirits. The feeling is meant to be akin to the feeling of cathedrals, with a sense of grandeur that compels the user to look up. Built with concrete masonry units (CMUs), concrete and steel components, the exterior of the building was designed to look a bit “muscular”, consistent with use as an athletic facility. The building rises to the north with two “paws” and south-facing clerestory windows that amount to a tail, suggesting a powerful animal.

Why Masonry? At Davy Architecture, we like concrete masonry units. They are among the most durable materials, and do not require finishing because they are available with integral colors. They also come in a variety of textures, providing many design opportunities. Masonry takes abuse better than any other wall system. For facilities like gymnasiums, which are intended to stand for 80 to 120 years, CMUs are not just the best choice - they are the only choice. We incorporate concrete masonry units into our design quite frequently, just for that very reason.

The building was built to LEED® Gold Standards, but the expense of applying for the formal certification was not the optimum use of the taxpayer dollars. Ensuring that it functions well and saves money was the priority for the designers and district.
**Rancho Cucamonga
Corporate Yard -
Administration/Crew
Building and Household
Hazardous Waste Facility**
Rancho Cucamonga, California

**ARCHITECT:**
Pitassi Architects, Inc.
8439 White Oak Ave., Suite 105
Rancho Cucamonga, CA 91730

Curtis J. Dahle, AIA
Principal-in-Charge

**STRUCTURAL ENGINEER:**
R.M. Byrd and Associates, Inc.

**GENERAL CONTRACTOR:**
Oakview Constructors, Inc.

**MASONRY CONTRACTOR:**
Haxton Masonry, Inc.

**BLOCK PRODUCER:**
Angelus Block Company, Inc.

**OWNER:**
City of Rancho Cucamonga

**PHOTOGRAPHY:**
Jerry Laursen Photography

**ARCHITECT’S COMMENTARY:**
The City of Rancho Cucamonga had outgrown their existing Public Works building and a new 31,755 square-foot structure was planned for the administrative offices and crews who maintain the city’s streets, parks, buildings and vehicles. In addition, the city wished to relocate their Household Hazardous Waste (H.H.W.) disposal operations from a temporary yard on county-owned property to their own permanent location.

Operated on weekends, the new 8,100 square-foot H.H.W. Facility is available to residents, and is arranged on the site for convenient vehicular drop off of materials.

**WHY MASONRY?**
The area around the project site has mostly aging tilt-up concrete buildings. Concrete masonry units (CMUs) offered a structural material with a great variety of options for color and finish texture, which allowed for an aesthetically pleasing durable building to be constructed well within budget.

The three courses of scored split-faced CMU, which capped the existing site wall, helped begin the discussion of material selection for this next phase of the Corporate Yard’s expansion. The new site wall was detailed the same as the old wall, but with updated colors for the cap. The Admin./Crew yard is in one accent color (red) with the H.H.W. yard in a different accent color (green). Both buildings have the same field color block utilizing a selected blend of three related colors. And, both buildings utilize the same types of block for detail elements (scored split-faced block wainscot, burnished block accent stripe near the window heads, and a row of precision block at the top of the walls), but in the two different accent color schemes.

Listed are a few passive solar design features incorporated into the Administration/Crew Building:

- Large, deep-set windows are located on the north side of the building, with smaller windows divided by precision block vertical shading fins on the east and west ends;

- A rooftop array of photovoltaic panels mounted on an angled steel frame covers the entire south portion of the building’s flat roof.
Located in the High Desert area of Adelanto, California, the new Adelanto High School campus was designed to serve as a community hub while maintaining the integrity and security demanded by a high school campus. The 58-acre complex includes 110 classrooms as well as joint use community facilities including a 525-seat performing arts theater, a 3 court basketball gymnasium with 1,850 seats, a 50m Olympic size pool, a state-of-the-art learning resource center and a 5,000-seat football stadium. The campus is broken into eleven single-story and two-story masonry structures.

**Why Masonry?** Integrated pedestrian and vehicular circulation, supervision, security, sustainability and durability were the School District’s main design concerns. The use of concrete masonry units (CMUs) throughout assisted in solving many of these challenges. The masonry buildings were organized to create a courtyard focusing on the heart of the campus in order to maximize campus security while minimizing the amount of staff needed for supervision.

The site utilizes both precision and split faced CMU walls to minimize vandalism concerns, while the integrally colored blocks were selected as a derivative of the native desert landscape. Native drought-tolerant landscaping and irrigation systems surround the areas of congregation to further highlight a correlation between the school and the environment.

School spirit is emphasized throughout by the use of color, school mascot and logos. Digital wall graphics adorn many of the main public spaces to reflect the community’s proud heritage. Quotes from famous individuals throughout history inspire students to strive for excellence academically and physically.
Chronic Disease
Clinical Research Center
Harbor-UCLA
Medical Center
Torrance, California

ARCHITECT:
Lundstrom & Associates Architects
9 Corporate Park, Suite 250
Irvine, CA 92606

Jon E. Lundstrom, AIA
Principal-in-Charge

Edward Gomez
Lead Designer

STRUCTURAL ENGINEER:
STB Structural Engineers

GENERAL CONTRACTOR:
Rudolph & Sletten

MASONRY CONTRACTOR:
Masonry Masters, Inc.

BLOCK PRODUCER:
ORCO Block and Hardscape

OWNER:
LA BioMedical Research Institute

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Larry A. Falke Photography

Architect’s Commentary: The Chronic Disease Clinical Research Center (CDCRC) is a 22,670 square-foot building which was completed in October of 2012. The CDCRC consolidates the collaborative research programs of multiple investigator groups who are studying chronic disease, such as heart disease and cancer, and enables investigators to expand their clinical research activities.

The project includes space for investigators and research personnel; outpatient research clinic with dedicated patient parking; research pharmacy; specimen processing laboratory and storage; cardiac computerized tomography reading center; exercise physiology, pulmonary function and cardiac laboratories; and research records storage.

Why Masonry? The project utilizes concrete masonry units (CMUs) for the majority of the structural walls. The CMU system was chosen for its durability, ease of construction and aesthetic properties, and in this building is used to enhance the campus palette of buildings that have already established CMU as the primary construction material. Approximately five years previous to the CDCRC building, Lundstrom & Associates designed and constructed the immediately adjacent facility: The Hanley Hardison Research Center. This building also used concrete masonry units as the primary construction material. Together, these buildings (along with a third CMU building across the access road) are the future of the new LA BioMed Campus at the Harbor-UCLA Medical Center. Much like the concrete masonry itself, these buildings will be the cornerstone to their new facilities.

The finish on the concrete masonry is mostly a burnished face with a small accent wall near the patient entry that utilizes a honed block. The texture of the CMU works to provide a great contrast to the smooth stucco and streamlined storefront glazing systems.

The project is designed to LEED® Silver equivalent per The National Institute of Health Basis of Design for this building.
Architect’s Commentary: Located in the High Desert area of Victorville, California, the new Silverado High School Sports Complex was developed for continuous year-long sports use for the adjacent 3,800-student high school as well as the community at large. The 22-acre complex encompasses a new 5,000-seat football/soccer stadium with an artificial turf field and a 9-lane oval running track with concrete masonry unit (CMU) athletics and concessions buildings. Also included is an outdoor, thermal-solar heated, 50-meter Olympic sized pool surrounded by a secure, but artistically designed CMU enclosure and pool concession building. Completing the rest of the facilities are a series of baseball fields and basketball and tennis courts.

Why Masonry? Enhanced pedestrian and vehicular circulation, supervision, security, sustainability and durability were the school district’s main design concerns. The use of concrete masonry units throughout assisted in solving many of these challenges. School spirit is emphasized throughout by the use of color, school mascot and logos. The site utilizes both precision and split face CMU walls to minimize vandalism concerns, while the integrally colored blocks were selected as a derivative of the native desert landscape.

In response to the existing built environment, most of the athletic fields were re-situated within their original location. The most prominent masonry design language was extended from the original campus to the new buildings and site structures, but they were enriched with their own character. Native drought tolerant landscaping and irrigation systems surround the areas of congregation to further highlight a correlation between the school and the environment.

The sports fields by nature are outdoor learning environments, but the sense of community is created by strategically locating gathering spaces for the students and visitors in each particular venue. At the main entrance of the stadium there is a “Celebration Plaza” for large pre-and post-game gatherings that is nestled between the stadium home and visitor entry buildings and the field. The aquatic center also provides a gathering space at the front entrance and has a shaded patio area next to the concessions. The varsity fields and sand volleyball courts are also provided with gathering spaces next to the concessions and restroom building.
Architect's Commentary: The fifteen-acre Southeast Asian Tiger Exhibit at the San Diego Zoo Safari Park creates an immersive, educational experience for the visitor. The state-of-the-art exhibit houses and allows for the care, study and conservation of the endangered Southeast Asian Tiger.

Why Masonry? Concrete Masonry forms the base of the tiger holding building, houses the tigers’ bedrooms, keeper facilities, food preparation and storage space.

Here the tan-colored masonry meets strict washdown and disinfection requirements for animal safety, while providing a feeling of warmth and openness for the keepers.

The visitor experience culminates at the Sambutan Long House which sits atop the tiger holding building. The interior, which is composed of Concrete Masonry, performs the dual function of fulfilling safety requirements for the tigers and creating an authentic, rustic feel. Visitors can feel as though they are in the middle of an Indonesian rainforest as they can interact with the tigers through the glass walls.

The outdoor Tiger Exhibits are terraced on the hillside and carefully situated for optimal views. Interpretive elements, including Southeast Asian cultural artifacts and poaching exhibits, allow visitors to learn what they can do to help the endangered tigers. A logging camp playground is juxtaposed with bamboo, conifer forests and waterfalls to educate the visitor on the devastating effects of deforestation. The surrounding tiger habitats immerse the visitors into the tiger’s natural environment.
Architect's Commentary: Due to poor air quality, Hoover High School’s woodshop was scheduled to be closed. Instead of discontinuing the program altogether, a new 5,343 square-foot, LEED® certified “Silver” woodshop was constructed adjacent to the old facility. The new woodshop is designed to be a model of “Green Construction Technology” for the 21st century and the cornerstone for the school’s new “Sustainable Academy of Building & Engineering” (SABE), integrating English, earth science, geometry, algebra, world history, woodworking, literature and green technology classes into the projects the students create.

Why Masonry? The use of concrete masonry units (CMU) was key to the overall success of the project. Foremost was the necessity of constructing an explosion-proof area for the collection of the hazardous combustible dust. In addition to providing superior fire resistance, CMU also provides sound attenuation necessary to address the noise generated by the ventilation system and shop equipment. The permeable interlocking concrete pavers utilized in the patio address water quality, solar reflectiveness and ADA compliance. Two similar red colors of split face concrete masonry units were blended together to provide a rough, natural look that complements the sleekness of the metal and glass incorporated into the building.

The facility incorporates a maximum amount of quality day-lighting with the surrounding glazing high enough to provide light without excess glare. A key factor of the design was the incorporation of an energy efficient dust collecting and ventilation system for the modern commercial shop equipment. Roof-top Photovoltaic panels, drought tolerant planting, permeable pavers and water efficient fixtures are some of the features that demonstrate the green technology concepts the students are learning. The new trellised patio area is utilized by the SABE curriculum for a variety of individual and group activities.
Concrete Masonry Units (CMUs) are dimensionally and aesthetically pleasing for ANY of your existing or future designs. CMUs can be integrally pigmented and textured to meet a wide range of client and project demands. CMUs are design flexible, versatile, noncombustible, durable, economical and locally produced.

Funding for the production and publication of the CMU Profiles in Architecture is provided by:

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• Protecting and advancing the interests of the concrete masonry industry.
• Developing new and existing markets for concrete masonry products.
• Coordinating Members’ efforts in solving common challenges within the masonry industry.

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The 2017 CMACN/AIACC Concrete Masonry Design Awards competition “Call for Entries/Request for Entry Forms” will be available at www.cmacn.org January 2017.

The 2015 award winning projects can be viewed at www.cmacn.org.

Please contact the CMACN Office at (916) 722-1700 or info@cmacn.org with any questions.