

Why Masonry? www.whymasonry.org

**Concrete Masonry Association of California and Nevada** 

I	nside this Is	sue	
ommitment Center	2	Murillo Family Observatory	7
ng Resouce Center	3	U.S. Army Reserve Center / OMS / UHS	8
re College Center, Technology Center	4	Sobrato Pavilion, Kindergarten Building and Site Improvements at Nativity School	9
o Familias leart Families		1150 Affordable Rental Housing	10
	5	Temecula Valley High School Theater	11
urchasing Complex	6	CMACN Producer Members	12



**Cerritos College Facility and Pu** 



# Stanislaus County Juvenile Commitment Facility

Modesto, California

ARCHITECT: Lionakis 1919 Nineteenth Street Sacramento, CA 95811

Maynard Feist, AIA Principal

STRUCTURAL ENGINEER: Lionakis GENERAL CONTRACTOR: Roebbelen Contracting, Inc. MASONRY CONTRACTOR: Bratton Masonry, Inc. BLOCK PRODUCER: Basalite Concrete Products, LLC Owner: County of Stanislaus ©PHOTOGRAPHY: Chip Allen, Chip Allen Photography

*Architect's Commentary:* As one of several populous counties in California, Stanislaus was the only county without a commitment facility for minors. As a result, project funding was granted, including \$16 million from the state with an additional \$6 million in matching funds from the county. The new commitment facility for court-committed minors. Housing includes a 30-bed and 15-bed unit for boys and a 15-bed housing unit for girls. The facility also contains classrooms, a multi-purpose gymnasium, visitation area, full service kitchen, culinary instructional classroom, program rooms, administration and a secure recreation yard.

Why Masonry? Located in the Central Valley of California where extreme temperatures require building materials with a high thermal value and mass to maintain energy efficiency, the architect chose to use insulated block. This not only improved the facility's energy and efficiency, but also added to its durability and security.

Additionally, the block, which was coated with a siliconized rubber coating to make it water repellant and anti-graffiti, was selected to minimize maintenance. The coating also added a deeper tone and luster to the masonry, which accentuated the block's colors, aggregates and textures. A variety of colors and textures were utilized to create patterns and identify distinct functional areas. Using split faced block throughout the exterior helped to ground the building and create the feel of permanence. The overarching goal for this project was to minimize the institutional feeling through a variety of masonry types that allowed for expression through decorative colors, types and textures.

The selection of concrete masonry allowed the design team to fulfill the County's goal of creating a rehabilitative, normalized environment for their Juvenile Commitment Facility, while adding value, ensuring durability and providing a high security environment.











Architect's Commentary: The Dale and Mary Schwartz Learning Resource Center is located in Paso Robles, California, one of two Cuesta Community College campuses for the San Luis Obispo County Community College District. The Cuesta College North County Campus as it is called, is a relatively new campus with the Learning Resource Center being the second new permanent building on campus.

The building opened to serve students on January 16, 2012. The 33,385 square-foot, two-story structure includes a new library, group rooms and 32 station computer lab, seven classrooms, facility offices and a 260-seat, multiuse lecture hall with raised platform, all under one roof.

To provide for natural day lighting into the large main library, a series of eight pyramid dome skylights were designed. In addition, an  $8' \times 18'$  ridged skylight allows natural daylight to permeate into the gallery area. Other energy savings systems include the use of energy efficient light fixtures, low E insulated exterior glazing, overhangs and light shelves. Why Masonry? Concrete masonry units (CMUs) are utilized throughout the project for their durability, structural performance, fire resistive construction and aesthetic quality. The use of the integral color split face CMUs define the areas within the building and provide direction to the entrance of the facility.

A combination of precision and split face concrete masonry units were used along the exterior walls to not only provide structural support and fire resistive construction, but to increase energy performance. In conjunction with the CMUs, the exterior installation finish system (EIFs) and interior rigid installation help to reduce the transfer of heat and cold throughout the building envelope, thereby minimizing temperature fluctuation.







#### DALE & MARY SCHWARTZ LEARNING RESOURCE CENTER Paso Robles, California

ARCHITECT OF RECORD: IBI Group Architecture Planning 4115 Broad Street, Suite B6 San Luis Obispo, CA 93401

Richard Mello, AIA Principal-in-Charge

Geoffry Stoner, CCSA Project Manager

Design ARCHITECT: PMSM Architects 1266 Monterey Street San Luis Obispo, CA 93401

Fred Sweeney Design Architect

STRUCTURAL ENGINEER: Ehlen Spiess and Haight, Inc. CONSTRUCTION MANAGER: Blach Construction MASONRY CONTRACTOR: Bratton Masonry, Inc. BLOCK PRODUCER: Air Vol Block, Inc. Owner: San Luis Obispo Community College District-Cuesta College ©PhotogRAPHY: Kent Clemenco, Kent Clemenco Photography



### College of the Sequoias Tulare College Center Phase 3: Animal Science and Technology Complex Tulare, California

ARCHITECT: NTD Architecture 4930 W. Kaweah Court, Suite 105 Visalia, CA 93277

Jay R. Tittle, AIA Partner, CEO

STRUCTURAL ENGINEER: Lane Engineers, Inc. CONSTRUCTION MANAGER: Klassen Corporation MASONRY CONTRACTOR: Frazier Masonry Corporation BLOCK PRODUCER: Basalite Concrete Products, LLC OWNER/PROJECT MANAGEMENT: College of the Sequoias ©PHOTOGRAPHY: Kevin Tittle, Kevin Tittle Photography



*Architect's Commentary:* The College of the Sequoias Animal Science and Technology Center is Phase 3 of the Tulare College Center Master Plan. At this state-of-the-art facility, students are taught the fundamentals of plant and animal science using unparalleled hands-on techniques.

This 65,000 square-foot Center serves the needs of a growing local industry and integrates laboratory and classroom spaces for animal science and technology education. The Center includes a state-of-the-art artificial insemination lab, as well as a small animal complex which is used for rehabilitating animals that have undergone surgery. Other Farm Animal Complex facilities include: beef, sheep, swine and equine barns, as well as a riding area and a show facility.

Why Masonry? The use of concrete masonry units was essential for this project because of the need for a lowmaintenance and durable building material that would also support the animal science programmatic elements. The color scheme and Art Deco building details are consistent with the academic and administrative facilities that are part of Phase 1 of the Tulare College Center Master Plan.









CMACN 2014 January Issue of "CMU Profiles in Architecture"











### "PARQUE Y CENTRO Comunitario Familias Corazones Verdes" – Green Heart Families Park and Community Center Santa Ana, California

ARCHITECT: TAYLOR

17850 Fitch Irvine, CA 92614

Neal Rinella, AIA, ACHA Principal

STRUCTURAL ENGINEER: KPFF Consulting Engineers GENERAL CONTRACTOR: McCarthy Companies and Construction, Inc. Masonry Contractor: Masonry Concepts, Inc. BLOCK PRODUCER: Angelus Block Company, Inc. Owner: Latino Health Access ©PHOTOGRAPHY: Ryan Beck, Ryan Beck Photography

Architect's Commentary: Imagine a community with no public parks or grassy outdoor place to play and relax. The Parque y Centro Comunitario Familias Corazones Verdes or Green Heart Families Park and Community Center was created to address this vital need. The goal was to provide a gathering spot for the promotion of healthy, active families. The idea began after a mother brought the idea for an outdoor play area to the local non-profit organization, Latino Health Access. As the project developed, the idea grew to include a new 2,500 square-foot Community gathering space, as well as the park and play structures.

The project, located in Santa Ana, California, serves as recreation space for an estimated 6,500 surrounding residents to exercise, learn and play. Sited on a half-acre, the center includes a multipurpose room, industrial kitchen, office, and restrooms. Exercise, parenting, and language classes are offered inside, while the outdoor play areas and park equipment further encourage healthy activities for community members of all ages. The kitchen will prepare thousands of home-made tamales, as just one source of fundraising to support this unique center.

Why Masonry? A simple building material palette combines concrete masonry units, painted steel, metal roofing, and bold colored tiles as main elements. The concrete masonry offers simplicity of construction, needed durability, and a small environmental footprint. The indoor palette repeats the bold colors in recycled rubber flooring and colored tile at the kitchen.

As the first community-driven public recreational and educational facility promoting health and wellness in a resource challenged neighborhood, this effort is historic. All of the design-build partners donated architectural and preconstruction services. Local families, functioning as the park steering committee, raised funds to support construction/implementation of the project and plan a prominent, volunteer role in facility and grounds maintenance.



# CERRITOS COLLEGE FACILITY AND PURCHASING COMPLEX

Norwalk, California

ARCHITECT: HPI Architecture 115 - 22<sup>nd</sup> Street Newport Beach, CA 92663

Lawrence A. Frapwell, LEED<sup>®</sup> AP BD+C *President* 

Douglas Choi, LEED<sup>®</sup> AP *Designer* 

Ammar Sarsam, LEED<sup>®</sup> AP BD+C Project Manager

Manish Travidi, LEED<sup>®</sup> AP Construction Administrator

STRUCTURAL ENGINEER: MHP Structural Engineers GENERAL CONTRACTOR: Bayley Construction MASONRY CONTRACTOR: Winegardner Masonry, Inc. BLOCK PRODUCER: ORCO Block Co., Inc. OWNER: Cerritos Community College District ©PHOTOGRAPHY: Douglas Choi, LEED® AP, HPI Architecture



*Architect's Commentary:* The new Facilities and Purchasing Complex is an approximately 34,000 square-foot, one and two-story facility that houses administrative offices, conference rooms, an emergency operations center (EOC), maintenance shops, warehouse/storage spaces and a large maintenance yard.

**Why Masonry?** This building was designed using concrete masonry units with various colored building accent components that tie into the existing campus vernacular while providing a durable, cost-effective design. To reduce operational costs the maintenance shops and warehouse storage spaces are naturally ventilated via operable windows. Lighting is supplemented with vented skylights throughout the building to provide day-lighting. The main entry elevation incorporates a deep roof overhang which protects the administrative office and conference spaces from solar gain. Horizontal metal sunshades protect the long vertical windows from southerly sun exposure and add detail to the overall composition of the building.

Building materials consist of three types of concrete masonry (precision, split face and burnished), colored metal accents (sunshades and roof forms) and glass. The judicious use of split face and burnished block at the "public" oriented spaces, coupled with the roof form and solar sunshade details, create an appropriate environment for a community college campus.







CMACN 2014 January Issue of "CMU Profiles in Architecture"







ARCHITECT: HPI Architecture 115 - 22<sup>nd</sup> Street Newport Beach, CA 92663

Lawrence A. Frapwell, LEED<sup>®</sup> AP BD+C *President* 

Mary Hendrickson Designer

John Paris Project Manager

STRUCTURAL ENGINEER: JC Lian Associates GENERAL CONTRACTOR: Sea West Enterprises, Inc. MASONRY CONTRACTOR: Ramirez Masonry, Inc. BLOCK PRODUCER: ORCO Block Co., Inc. OWVER: California State University San Bernardino ©PHOTOGRAPHY: Paul B. Gardner, Paul B. Gardner Photography



*Architect's Commentary:* This facility supports academic programs of the University within the Department of Physics, College of Natural Science and the Liberal Studies Program. It also serves the public and local schools. The facility houses a lunar observatory, solar observatory, astronomy lab, lecture space and an observation courtyard.

Sited on a prominent hill overlooking the campus, the project is intended to provide an iconic landmark for the campus. Attention was given in the placement and design of the building to create an experience of exploration and discovery for the university students as well as first time visitors.

**Why Masonry?** The primary building materials, precision concrete masonry and steel were selected for their durability and cost effectiveness. To create the ascending, tapered, monolithic forms of the observatory towers, custom fabricated, slope face, precision masonry units with a white aggregate matrix and white grout were specified. In addition to the sustainability and minimal maintenance inherent in concrete masonry, the monolithic white forms of the observatory create a pleasing contrast with the organic nature of this remote site.

#### U.S. ARMY RESERVE CENTER / OMS / UHS Las Vegas, Nevada

ARCHITECT: Mason & Hanger 300 West Vine Street, Suite 1300 Lexington, KY 40507

Aasiya M. McCoy, AIA, LEED<sup>®</sup> AP BD+C Design/Project Principal

STRUCTURAL ENGINEER: Mason & Hanger GENERAL CONTRACTOR: MW Builders, Inc. MASONRY CONTRACTOR: A-1 Masonry & Sandblasting BLOCK PRODUCER: CEMEX OWNER: U.S. Army Corps of Engineers ©PHOTOGRAPHY: Abstract Photography, Inc.

Architect's Commentary: The U.S. Army Reserve Center (USARC) just outside Las Vegas, Nevada includes four buildings totaling 99,908 square-feet: a Training Building, Unit Storage Building, Organizational Maintenance Shop, and an Unheated Storage Building. This USARC will support 800 permanent reservists, full-time support personnel, and additional military and civilian personnel on a visiting basis.

Administrative areas include private offices, administrative common spaces, recruiting and retention offices, mail room, and a family support office. Educational spaces include classrooms, library reading and storage, a learning center, training aid storage, and weapons simulator. The Assembly Hall includes kitchen and chair/table storage. Physical fitness area, weapons vault, storage cages, and facility maintenance/operation/ support areas are also included.

The Training Building is designed to blend into the site and the mountains beyond. The design lowered the roof and created office space in what would have been unused attic space. The private offices form the edges of a large open administration space.

Why Masonry? The large curvature of the building façade increased the length of exterior wall and allowed for additional office spaces to have daylighting. We were able to achieve a smooth curve by segmenting the radius of the concrete masonry unit (CMU) walls into large sections. Anti-terrorism requirements were met through the use of CMU walls by providing a stout structure for the blast resistant windows. The concrete masonry unit walls were utilized as special reinforced shear walls. This provided an economical means of achieving the high seismic design requirements for the Las Vegas area. The use of CMU walls is preferred in Training Buildings in order to withstand the abuse from the soldiers during their weekend drills.

The facility was designed in accordance with the Energy Policy Act of 2005. In addition to compliance with the standard, the building was designed to achieve an energy consumption level that is at least 30% below the level achieved under ASHRAE Standard 90.1. It also utilized solar panels on the parking canopy structures. The project was designed to a LEED Silver rating.





*Architect's Commentary:* Nativity School is a 300student, K-8 campus, abundant with 50 heritage oak and other specimen trees. It has provided a sound educational foundation to its students for more than 50 years. The Nativity School/Parish community has grown annually, maturing to a durable and lasting community.

The project scope required the demolition and replacement of the existing Kindergarten building and Father Ford Hall – undersized, seismically deficient, aging buildings that no longer accommodated the school's educational program requirements and social activities. For years, volleyball and basketball teams practiced and played their regular season games in rented facilities.

Why Masonry? The new multi-use facility, Sobrato Pavilion, serves a multitude of functions with each room serving various uses and various Nativity community groups. The Owner required that the typical multi-use "box" be durable but not ordinary. Tan precision and split face concrete masonry units (CMUs) and 4" gray CMU accent bands articulate the exterior and interior surfaces economically providing color, texture and interest to, potentially, an ordinary "box". Minimal drywall finish was required or used in the gym.

The mass and scale of the gymnasium's centralized concrete masonry "box" is diminished by a steel truss hip roof supported by CMU columns and walls. Hip roofs over ancillary spaces and covered passages supported by split faced CMU columns with precast caps wrap the perimeter and further diminish the overall scale. Ancillary space exterior walls are stucco over a concrete masonry veneer wainscot with precast caps. High, operable, dual glazed windows on three sides of the building provide ample light. CMU walls provide a thermal mass that reduces natural resource consumption and CMU mass dampens noise transmission to the neighboring residences. The indoor/outdoor stage serves indoor student assemblies/ceremonies and the outdoor trellis covered Student Dining Patio. The exterior stage is used by entertainers during parish fundraisers, or for the outdoor movie night's screen.

The Kindergarten, with its own play yard and dining area, is residential in scale given its proximity to the neighboring residences. The wood framed and stucco exterior walls top a split faced concrete masonry veneer wainscot with precast concrete caps that echoes ancillary space wall construction at Sobrato Pavilion. Both buildings convey durability, soundly founded, similar to Nativity's own educational principles.

Also included: a precast capped, CMU column and wrought iron site perimeter fence, a 75,000 gallon underground storm water retention tank that slows site runoff, site landscaping and infrastructure improvements.



## SOBRATO PAVILION, KINDERGARTEN BUILDING AND SITE IMPROVEMENTS AT NATIVITY SCHOOL

Menlo Park, California

ARCHITECT: Keller and Daseking Architects 825 Oak Grove Avenue, Suite A 203 Menlo Park, CA 94025

Walter L. (Pat) Keller, AIA Principal-in-Charge

William R. Gutgsell Project Architect

Wieslawa Bednarski Patty Hoo Project Team

STRUCTURAL ENGINEER: Rinne & Peterson Structural Engineers GENERAL CONTRACTOR: SC Builders, Inc. MASONRY CONTRACTOR: Soares Masonry, Inc. BLOCK PRODUCER: Calstone Company, Inc. Owner: Nativity School ©PHOTOGRAPHY: William R. Gutgsell, Keller and Daseking Architects

#### 1150 AFFORDABLE RENTAL HOUSING Ventura, California

ARCHITECT: Mainstreet Architects + Planners, Inc. 422 East Main Street Ventura, California 93001

Dao Minh Doan, RA, Sr. Principal Design Architect

Deborah Guthrie, RA, Sr. Principal Design Team

Kara Davis, RA Project Architect

STRUCTURAL ENGINEER: Dahl Taylor and Associates, Inc. GENERAL CONTRACTOR: McCarthy Companies and Construction, Inc. MASONRY CONTRACTOR: McCarthy Companies and Construction, Inc. BLOCK PRODUCER: Angelus Block Company, Inc. OWNER: City of Ventura Housing Authority ©PHOTOGRAPHY: Stephen Schafer, Schaf Photo (top photo) Dao Minh Doan, RA, Mainstreet Architects + Planners, Inc. (Photos 2-4)

Architect's Commentary: Although small in scale, the 1150 Affordable Rental Housing symbolizes some of the firm's most strongly held principles in built form: support urban in-fill development; advocate high density and mixed use; promote sustainability in design and construction; and encourage creativity within restrained budget, even for "subsidized" housing.

Why Masonry? The project consists of twelve, two-story townhouse-type residential units ranging from two to three bedrooms with two to two and a half baths. The units sit atop a concrete podium housing the garage. Due to its in-fill location with zero side setbacks, it is expected that adjoining properties will be developed in the future with side walls abutting the project. This influences the decision to use concrete masonry units (CMUs) as the most suitable material: even while the walls would remain blank for a long time (no windows allowed), creative choices of CMU colors can enhance the building aesthetics. Indeed the concrete masonry units were selected in three different colors, with a mix of 50%, 30% and 20%. Furthermore, the colors are laid out so they vary as they go up vertically: they represent the multiple layers of history and the industrial character of the area, and how this is resurging through redevelopment efforts. Eventually the CMU transitions into steel, glass and stucco above it, as a celebratory gesture toward this revitalization of the neighborhood.

Along the front façade of the building, the CMU is further enhanced with different textured blocks: fluted at the base, split face above it, and burnished over the main entrance area and as header over the storefronts. This creative use of the concrete masonry units gives the project a strong presence with a solid base, a stout main body, and very clear visual cue for the entry point.

Aside from being a very durable material, the concrete masonry units used are aesthetically central elements of the design concept.





















#### TEMECULA VALLEY HIGH SCHOOL THEATER Temecula Valley Unified School District

Temecula Valley Unified School District Temecula, California

ARCHITECT: MGPA Architecture, Inc. 6965 El Camino Real, Ste. 105-278 Carlsbad, CA 92009

Fred H. Gualda Principal Architect

Perry Pursifull Principal Architect

STRUCTURAL ENGINEER: Delta Engineering, Inc. GENERAL CONTRACTOR: Ledcor Construction, Inc. MASONRY CONTRACTOR: Kretschmar & Smith, Inc. BLOCK PRODUCER: RCP Block & Brick, Inc. Owner: Temecula Valley Unified School District ©PHOTOGRAPHY: Diana Gualda, Colordrock Photography

*Architect's Commentary:* The Temecula Valley High School Theater is an 800-seat Performing Arts Center added to an existing high school campus. The project is a School District-wide "magnet" facility that is intended to draw performing arts students from throughout the District.

The new building is nestled between the old locker buildings, which have been converted to performing arts classrooms that support the new Theater, and directly behind the old gymnasium, which has been converted to a Multi-Purpose facility (a new gymnasium was recently constructed on the campus). The shower areas of the old locker buildings were converted to new Men's and Women's restrooms that serve the new buildings. Utilizing the existing plumbing and structure saved the school district a significant amount of money and square footage.

Why Masonry? The masonry colors and textures were selected to blend and match with the existing campus character which is predominantly masonry. The huge masses of the fly loft and support spaces were broken up by the use of multiple colors and textures. This was intensified at the lower elevations with bands of various colors to give human detail and scale to adjacent pedestrian areas.

The existing gymnasium was retained, but a new lobby was constructed adjacent to it which serves both the theater and the gymnasium. The gymnasium can thus be utilized as an extended lobby during intermission for sale of snacks, displays, etc. The lobby itself was designed as an art gallery where the work of students can be displayed.

Large graphics were added to the exterior of the fly-loft which can be seen from most adjacent streets, giving the entire campus an identity as well as identification.



CMACN 2014 January Issue of "CMU Profiles in Architecture" 11.

# Concrete Masonry Association of California and Nevada

PRESORT STANDARD US POSTAGE PAID PERMIT NO. 604 SACRAMENTO, CA

#### **CHANGE SERVICE REQUESTED**

CMACN

6060 Sunrise Vista Drive Suite 1990 Citrus Heights, CA 95610 www.cmacn.org

# 2015

# CMACN/AIACC CONCRETE MASONRY DESIGN AWARDS "CALL FOR ENTRIES"

The 2015 CMACN/AIACC Concrete Masonry Design Awards competition "Call for Entries/Request for Binders" will be available at <u>www.cmacn.org</u> January 2015.

The 2013 award winning projects can be viewed at <u>www.cmacn.org</u>.

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



#### ARCHITECTURAL CONCRETE MASONRY

Concrete Masonry Units are dimensionally and aesthetically pleasing for ANY of your existing or future designs. CMU's can be integrally pigmented and textured to meet a wide range of client and project demands. CMU's 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:

CEMEX

AIR Vol Block, Inc. (805) 543-1314 San Luis Obispo, CA 93401

ANGELUS BLOCK COMPANY, INC. (818) 767-8576 Fontana, CA 92335 Gardena, CA 90248 Indio, CA 92202 Orange, CA 92668 Oxnard, CA 93030 Rialto, CA92316 Sun Valley, CA 91352

BASALITE CONCRETE PRODUCTS, LLC (707) 678-1901 Carson City, NV 89706 Dixon, CA 95620 Selma, CA 93662 Sparks, NV 89431 Tracy, CA 95376

**CALSTONE COMPANY, INC.** (408) 984-8800 San Martin, CA 95046 Sunnyvale, CA 94086 (702) 643-1332 Las Vegas, NV 89115

**DESERT BLOCK COMPANY, INC.** (661) 824-2624 Bakersfield, CA 93307

ORCO Вьоск Со., Імс. (800) 473-6726 Indio, CA 92203 Oceanside, CA 92056 Riverside, CA 92509 Romoland, CA 92585 Stanton, CA 90680

#### RCP BLOCK & BRICK, INC.

(619) 460-7250 Lemon Grove, CA 91946 San Diego, CA 92154 Santee, CA 92071

SUPERLITE

AN OLDCASTLE COMPANY (702) 265-5970 Needles, CA 92363 (702)633-5787 North Las Vegas, NV 89030 Concrete Masonry Association of California and Nevada (CMACN) a nonprofit professional trade association established in 1977, is committed to strengthening the masonry industry in California and Nevada by:

- Providing technical information on concrete masonry for design professionals.
- 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.

For further informtion contact us at: Concrete Masonry Association of California and Nevada 6060 Sunrise Vista Drive, Suite 1990 Citrus Heights, CA 95610-7004

Tel: (916) 722-1700 Fax: (916) 722-1819 Email: info@cmacn.org Web Site: www.cmacn.org