Concrete Masonry Association of California and Nevada

January 2010

CMU Profiles in Architecture

Concrete Masonry is
Safe & Sound
www.cmacn.org

Featured in this issue:

"Keep our community safe and sound.
Build our facilities with concrete masonry."

Photography: ©Dean J. Birinyi

The Marine Mammal Center

Sausalito, California

Architect:
Noll & Tam Architects in Association with Scott Dennis
729 Heinz Avenue
Berkeley, CA 94710

Janet Tam, AIA, LEED® AP
Principal

Scott Dennis
Design Architect

Tad Costerison, AIA, LEED® AP
Project Architect

Structural Engineer:
Middlebrook + Louie
General Contractor:
Gonsalves & Stronck Construction Company
Masonry Contractor:
Milo Masonry
Block Producer:
Calstone Company
Owner:
The Marine Mammal Center

Architect's Commentary: The Marine Mammal Center is a 24-hour animal rescue and rehabilitation facility located in the Golden Gate National Recreation Area. The project's design was inspired by environmental responsibility and the adaptive re-use of a decommissioned NIKE Air Missile launch site. The goal was to consolidate the center's animal care pens and pools with the administrative, educational, and operations programs, introducing new buildings within the existing site.

The exterior program for animal care was placed at a level equal to the operations building's program needs. The design team envisioned an architecture that unified the interior and exterior programs in context of the site's culturally significant industrial character. The center wanted staff, volunteers, and visitors to be able to move easily between the animal care areas and the operations and educational spaces. Within the buildings, many areas required the capability to hose-down the rooms and therefore needed watertight floors and walls. For these reasons, the team selected honed CMU block for the entire facility. The honed CMU is an extremely durable material that can withstand the rigors of animal use, and is an appropriate base to the waterproof epoxy finish. Where exposed, the smooth quality of the honed CMU provides a warm and elegant finish that will withstand the demands of both the interior and exterior program needs.

The center's design and operations are highly sustainable. More than 7,000 square feet of PV cells, located on panels over the animal pools, provide shade for the mammals while generating up to 20% of the center's electrical power. The complex was designed to accommodate more PV cells on walkways and roofs over time. One former missile silo now houses the essential water treatment system. Water vessels in the silo reduce heat gain that occurs in above-grade vessels, reducing energy use that would be necessary to cool the water and reducing adverse affects of UV degradation of equipment. The water re-use loop is capable of cleaning and recycling 200,000 gallons of fresh and salt water. The low-level lighting for exterior walkways is a task-light concept reducing energy use by illuminating only the surfaces necessary to walk upon and also preserves the site's "natural darkness" required by the project EIR. Finally, by locating the new structures and pools where existing paving and temporary structures once stood, the project minimized impacts to the natural topography and features in the recreation area.

Photography: David Wakely, David Wakely Photography

Monarch Club

Nipomo, California

Architects:
Williams + Paddon Architects + Planners
2237 Douglas Blvd., Suite 160
Roseville, CA 95661

Terry Green, AIA
Principal

Structural Engineer:
Caruso Turley Scott, Inc.
General Contractor:
Wespac Construction
Masonry Contractor:
Peralez Masonry
Block Producer:
Air Vol Block, Inc.
Owner:
Shea Homes

Architect's Commentary: The Trilogy Monarch Club is a 31,000 sq. ft. community clubhouse located in Nipomo, in California's central coast region. The project is intended to offer the communities' residents resort style amenities that encourage social interaction, wellness and personal exploration. The variety of functions that the building provides required that the design be sensitive to advantageous adjacencies as well as maintain preferred separations. The building program required three distinct entry points, a main entry accessing the concierge lobby, a secondary entry serving the deli and the marketplace, and a tertiary entry serving the athletic club and spa.

Included in the Monarch Club are a Conservatory, Adelina's Bistro, which includes both sit-down dining and a more casual deli and marketplace, the Avila Banquet facility, which can accommodate both large and small social events up to 250 people, and a Wine Library, which is a small private dining room/meeting space with temperature controlled wine lockers and private gardens. Also incluced are an athletic club with state-of-the-art strength and cardio equipment, step exercise room, and swimming pool, the Sandalwood day spa, and the Center of Learning and Art Studio, which offers classes and opportunities for personal growth and exploration.

The use of quality construction materials assembled with exceptional craftsmanship was a goal at the outset of the project. Many of the flooring finishes were designed specifically to represent consistent design themes for the project such as Monarch Butterflies and the central California coastline. These can be found in custom mosaic and area carpets. There is also a glass floor system fritted with a small butterfly pattern which spans over a simulated streambed in the Sandalwood Spa.

Many of the wall openings focus to views of the adjacent golf course or access outdoor amenities and courtyards. We emphasized warm, rich materials such as wood window and door systems. We have included accordion style folding doors in specific places to allow ease of access to outdoor courtyards and create a very open atmosphere. Dry stacked stone walls are a very important part of the design concept and act as organizing elements for the building.

Due to its location on California's central coast, the Monarch Club is in one of the most restrictive seismic zones in the country. The use of concrete masonry units was employed extensively to resist lateral forces in the structure. Many walls of the project feature stone veneer, and in these cases CMU was used for lateral stability as well as an appropriate substrate for the stonework. Given the complex nature of the building floor plan and massing, concrete masonry walls were chosen as the most economical structural system for load bearing and lateral resistance.

Photography: Ed La Casse Photography

Roy Martin Middle School

Las Vegas, Nevada

Architect:
Pugsley. Simpson. Coulter. Architects
2480 E. Tompkins Avenue, Suite 222
Las Vegas, NV 89121

Wade J. Simpson, AIA, LEED® AP
Principal

Structural Engineer:
Mendenhall Smith Structural Engineers
General Contractor:
Pace Contracting Company
Masonry Contractor:
Ramco Masonry, Inc.
Block Producer:
Tri Delta (a subsidiary of Oldcastle, APG West)
ORCO Block Company, Inc.
Owner:
Clark County School District

Architect's Commentary: Roy Martin Middle School is a replacement for an existing school, where in 2004 the gymnasium fell victim to arson. While not all parts of the school were destroyed, the Clark County School District made the decision to replace it with a new prototype.

Due to multi-level classroom pods (a first for Clark County School District), the courtyard became the hub of the school. All school functions occur on or around this court. The courtyard serves as an organizational element as well as a central gathering place for students and teachers. Classes can be conducted in the amphitheater, science projects can be performed, and teachers can casually talk with students in this central binding space.

Additionally, a pedestrian and vehicular circulation analysis was performed on the school. This analysis aided in the development of such things as comfortable widths of hallways and stairs, the number of entrances to the school, easing vehicular congestion and, most importantly, lessening emergency evacuation times.

The use of concrete masonry (CMU) was essential to the design success of the school. Integral colored split face and single score units were used to not only provide texture to large walls, but to visually break up the two-story structure and reduce the impact of potential graffiti. The ability to combine structure with the finished exterior surface was an overriding factor for use of CMU, and allowed the project to stay under budget. In addition, CMU provided structural flexibility, which allowed us to locate fenestration to use exceptional day lighting techniques to bring natural light into the classrooms, and thus, reduce energy costs.

Day-lighting for the two-story classrooms occurs in two ways: Classrooms on the second level have direct light from above via roof monitors and windows, allowing for even lighting throughout the room. Classrooms on the first floor receive daylight via light shafts that penetrate between classroom pods on the second floor to rooms on the first. These light shafts also act as ancillary space for mechanical and electrical needs. The school is capable of receiving enough daylight throughout the year to only require artificial lighting 30% of the time classrooms are in use.

Photography: Janae Shields, Janae Shields Photography

Fresno County Juvenile Justice Delinquency Court

Fresno, California

Architect:
KMD Architects and Planners
421 SW Sixth Avenue, Suite 1300
Portland, OR 97204

Vern Almon, AIA, LEED® AP
Architect of Record

Tom Wornson
Design Architect

Construction Manager
Kitchell
2344 Tulare Street, Suite 301
Fresno, CA 93721

Structural Engineer:
Parrish Hansen, Inc.
General Contractor:
R. Pederson and Sons, Inc.
Masonry Contractor:
Bratton Masonry, Inc.
Block Producer:
Blocklite (a subsidiary of Basalite Concrete Products, Inc.)
Owner:
County of Fresno in Association with the California Administrative Office of the Courts

Architect's Commentary: In step with the current trend of locating courts in close proximity to where young offenders either await or are serving their sentences, the Juvenile Justice Delinquency Court portion of this four phase $176 million project stands completed.

The three-story 121,000 square foot, steel frame superstructure on concrete spread footings provides the campus' focal point. Offices for security, the district attorney, public defender and probation departments occupy the facility's first floor in addition to a cafeteria and child care center. At the latter's outdoor play area solid grouted concrete masonry units (CMU) with plaster veneer and ornamental iron work affords a secure environment for visiting youngsters.

All spaces, pertaining to court functions along with judicial support areas, public waiting rooms and ancillary spaces are found on the second level as is shelled space for two future courtrooms. The third story holds a prisoner transportation corridor with a dedicated security elevator constructed with 6-inch concrete bricks.

Non-load bearing, solid grouted, fully reinforced CMUs, fire resistant for up to four hours, were used for safety and security at inmate detention areas. This allowed security doors, equipment and air grilles to be installed and transformed into a unitized wall assembly. Detention construction projects have long relied on CMUs' durability and versatility. Kitchell believes the CMU is one of the most cost effective materials used to build a secure wall.

Blocklite's "Prairie Stone" in the Earth Blend Collection with the Canyon blend Rockface finish provided the veneer masonry for an accent element on the building's North entry elevations. Its usage also highlighted window elements and provided a visual anchor with the remaining three elevations.

Hailing CMU's versatility, KMD Architects chose to use it to convey the stateliness of the Court's elevations and reinforce its long lasting mission to Fresno County.

Photography: ©Dean J. Birinyi

Photography: Anthony O'Keefe, AIA, NTD Architecture

Advanced Technology Center

Victorville, California

Architect:
NTD Architecture
955 Overland Court, Suite 100
San Dimas, CA 91773

Jay R. Tittle, AIA
Partner

Shoji Takeshima
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 multi-functional 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".

Premier Crossing

San Diego, California

Architect:
Davis Davis Architects
3601 Fifth Avenue
San Diego, CA 92103

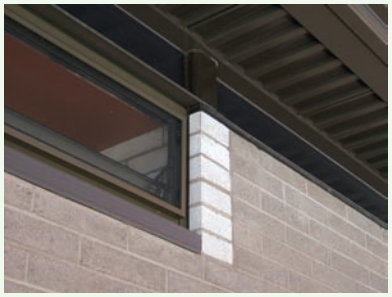
Robert L. Davis, Jr., AIA
Principal

Structural Engineer:
Martin Structural Construction, Inc.
General Contractor:
R & R Construction, Inc.
Masonry Contractor:
Herrera & Sons Masonry
Block Producer:
ORCO Block Company, Inc.
Owner:
Premier Melrose, LLC

Architect's Commentary: The location of the buildings within the natural landscape consists of muted red-browns and tans, which directed our choice of concrete block as a material. There are three building types that were laid out on the site per plan or "opposite hand" layout. This provided an opportunity to come up with multiple layers of façade elevations. The project has eleven buildings on the site. Within the buildings themselves we created a panelized system of layout that allowed us to once again flip and "opposite hand" the individual concrete block panel elements on the façade of each building itself.

We took advantage of the contrasts available between burnished block and normal block with stucco to create a palette of colors and structure that we could manipulate within an efficient module layout. Also, in order to accentuate color and texture, we chose to alternate 10″ precision block with 8″ block with stucco to create shadow lines and help delineate the different parts of the structure.

Photography: Wes Edell, Wes Edell Photography



Burgess Pool Facility

Menlo Park, California

Architect:
ELS Architecture and Urban Design
2040 Addison Street
Berkeley, CA 94704

Clarence D. Mamuyac, Jr., AIA, LEED® AP
Principal-in-Charge

Geno Yun, AIA, LEED® AP
Principal for Construction Administration

William Gordon, LEED® AP
Project Manager and Designer

Structural Engineer:
Baseline Engineering
General Contractor:
Page Construction Company
Masonry Contractor:
Milo Masonry, Inc.
Block Producer:
Basalite Concrete Products, Inc.
Owner:
City of Menlo Park

Architect's Commentary: The Burgess Pool Facility is a community aquatics center located in Burgess Park, the civic heart of Menlo Park, California. The main building and a maintenance building, clad entirely in concrete masonry units (CMU), help shelter the three pools from sun and wind while also shielding the nearby residents from deck lights and noise. As a symbol of the city's commitment to health, fitness and the environment, the buildings are designed with energy-saving features, and are sited to preserve many mature trees, while providing shady picnic areas with framed views of the neighboring coastal mountains.

Within the main building, the locker room and administrative wings are each housed in a concrete masonry enclosure. Located in the interstitial space between the two wings and the existing gymnasium is a light-filled, glass and steel framed central lobby. In contrast to the subtle tone of the CMU, lustrous orange ceilings extend past glazed clerestories to form exterior soffits, blurring the distinction between inside and outside. Warm, rich wood elements, such as cantilevered teak benches, cedar screen walls, and maple counters, are strategically located throughout the building to complement the rough, cool concrete building materials.

The repetition of the existing gym's brick wing walls were the inspiration for the use of concrete masonry units in an elongated 4-inch by 16-inch module. During the design phase, these blocks were stacked into interlocking taupe and cream colored planes, and then units were removed to the maximum structural extent possible to create openings high in the locker rooms and down to desk height in the administration rooms where privacy was not required. The resulting irregularly profiled walls emphasize the malleable nature of the concrete masonry units. Likewise, passing through this rhythmic series of massive planes heightens sensory awareness of the spatial environment.

Photography: David Wakely Photography, Photos 1-4
ELS Architecture and Urban Design, Photo 5

Military Operations on Urban Terrain (MOUT) Training Complex

San Clemente Island, California

Architect:
Vasquez Marshall Architects
13220 Evening Creek Drive, Suite 117
San Diego, CA 92128

David R. Vasquez, RA, LEED® AP
Principal

Structural Engineer:
Stedman & Dyson Structural Engineers
General Contractor:
I.E.-Pacific, Inc.
Masonry Contractor:
Persall Masonry Inc.
Block Producer:
RCP Block and Brick, Inc.
Owner:
Department of the Navy

Architect's Commentary: This Military Operations on Urban Terrain (MOUT) Training Complex is based on European and Third World urban patterns to give multi directional access for Navy S.E.A.L. Operations. Water, air, and land approaches are all possible for training purposes. The training facilities include 26 buildings consisting of a variety of building types, including a 5-story hotel, urban open square, City Hall/ Police building with jail, office, bank, school/ mosque, industrial, retail/ residential, embassy and an urban open market.

These collections of buildings, along with site walls, are designed to create diverse tactical situations for Navy S.E.A.L. training with narrow twisting, winding roads and pathways creating an unknown situation around each corner. The building interiors are designed in a similar fashion to the exterior style where each room, corridor and stair presents a new situation to the trainees. Unique features of this collection of buildings include the considerations made for blasting and explosives. All rooms were designed so that live explosives can be set off inside and not destroy the structural integrity of the building. Blasting windows have been integrated throughout the buildings to help with relief of these blasts.

Concrete masonry units (CMU) were chosen for their sustainability and durability. The CMU has to withstand the climate conditions, and military operations with little to no maintenance. The design team tracked this project under the LEED Rating System and applied the concepts and approach to sustainable design in the following categories:

Sustainable Sites - CMU placement did not require large equipment for delivery and required smaller staging areas during construction that reduced the development footprint.

Indoor Environmental Quality – Naturally prefinished CMU eliminated the need to paint interior surfaces and reduced the potential for mold growth in an ocean environment.

Innovation and Design Process - CMU improved environmental impact through increased lifespan. CMU is a strong, durable material, withstanding both routine natural wear and extraordinary impacts of natural and human conditions.

Materials and Resources – The CMU was manufactured locally in San Diego, which minimized fuel requirements for handling and transportation. Reinforcing steel was manufactured from 99 percent post-industrial recycled material. The CMU was manufactured with 20% recycled content including fly ash, slag cement, and silica fume that substitute partially for cement, and recycled aggregates were used in lieu of newly mined gravel.

Photography: Frank Domin, Domin Photography

Clark County Fire Station No. 33

Las Vegas, Nevada

Architect:
BJG Architecture + Engineering
6995 Sierra Center Parkway, Suite 200
Reno, NV 89511

Shaun P. Yauch, AIA
Architect of Record

Structural Engineer:
BJG Architecture + Engineering
General Contractor:
B&H Construction
Masonry Contractor:
Frazier Masonry Corporation
Block Producer:
CEMEX
Owner:
Clark County, Nevada

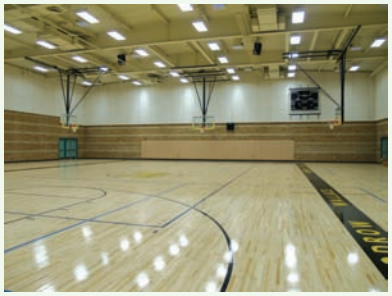
Architect's Commentary: Fire Station No. 33 is the second of four facilities planned throughout Clark County, Nevada. To achieve the station's design goals, BJG looked for building materials that reflected the ideal qualities of a public safety facility: functional, durable, and visually pleasing. We chose earthy red-tone colored ground face concrete masonry, with lighter colored cast stone decorative bands for most of the building appearance.

It was important for this facility to fit the scale and style of its surrounding community. Fire Station No. 33 sits at the edge of the Convention Center, within a larger residential area, yet serves the nearby Convention. Masonry was an obvious choice for BJG, because concrete masonry is common in the Las Vegas area and blends with the desert environment, yet lends itself to commercial applications with a residential feel.

More important than aesthetics, a fire station must be designed to keep emergency response times to a minimum. Load-bearing masonry walls at Fire Station No. 33 allow for the flexibility of available space by eliminating the need for interior columns. This flexibility allows the Fire Department to adapt the fire station to accommodate potential growth changes. Concrete masonry is showcased outside and inside the facility. Bringing the outside in was a key component to using masonry. BJG paid particular attention to detail, and instructed the contractor to rake the bed joints and flush out the head joints. This presented the masonry as a piece of art that ran throughout the exterior as well as the interior. This dramatically altered the masonry's appearance.

Although the fire station has to operate as a fine-tuned machine, it also serves as a home-away-from-home for fire fighters. For those who spend long shifts within the walls, the masonry provides a clean, no-frills working environment, while its ground face and color are warm and inviting.

Photography: Shaun P. Yauch, AIA, BJG Architecture + Engineering



Woodrow Wallace Gymnasium and Modular Classrooms

Lake Isabella, California

Architect:
SCArchitect, Inc.
1601 New Stine Road, Suite 280
Bakersfield, CA 93309

Stephen J. Corbin AIA, NCARB, LEED® AP
Principal Architect

Robert P. Pugh, Associate AIA
Senior Associate Project Manager

Structural Engineer:
John A. Martin & Associates, Inc.
General Contractor:
JTS Construction
Masonry Contractor:
O'Neal Masonry Partners
Block Producer:
Desert Block Company, Inc.
Owner:
Kernville Union School District

Architect's Commentary: With 23 relocatable buildings in a state of disrepair and an aging and outgrown activity center at Woodrow Wallace Elementary and Middle School, the District began a Master Plan for the campus that resulted in several projects. The District's main goal was to separate the middle school students from the elementary students. The first phase of work included removing the existing 23 relocatable buildings and replacing them with 19 new modular classrooms and restrooms, and building a new gymnasium.

The new 13,240 square-foot gymnasium is adjacent to the existing activity building. The gymnasium is constructed on a concrete slab, with integrally colored precision and split faced concrete masonry walls, a steel roof deck supported with tapered steel girders, and a modified four ply built up roof system. Steel columns and beams with steel stud infill, a steel roof deck with light-weight concrete fill, and standing seam metal roof were utilized for the lobby entrance. Tubular daylighting devices were used to harvest natural light for the gymnasium, while translucent wall panels create clerestory openings and a glass curtain wall are utilized to provide daylight in the lobby.

The gymnasium has a main basketball and volleyball court, and two crosscourt basketball and volleyball courts. Additional features include a coach's office, storage rooms, custodial room, multi-accommodation restrooms and a concession room. A display case in the lobby displays school awards. The existing activity building restrooms were remodeled for A.D.A. accessibility, and the roof line was modified to architecturally join with the new gym.

Approximately four acres of the campus grounds received site improvement to support the new construction. A.D.A. accessible paths of travel, integrally colored precision concrete masonry retaining walls, stairs and ramps from the upper portion of the existing campus were incorporated into the design. Four new exterior concrete basketball courts, an apparatus yard, landscaping and irrigation were also a part of the project.

Photography: Robert P. Pugh, SCArchitect, Inc.

Concrete Masonry Association of California and Nevada

CMU Profiles in Architecture

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

Concrete Masonry Association of California and Nevada
6060 Sunrise Vista Drive, Suite 1990
Citrus Heights, CA 95610-7004
Visit our web site at www.cmacn.org

CHANGE SERVICE REQUESTED

2011

CMACN/AIACC Concrete Masonry Design Awards

Mark your calendar for our "Call-For-Entries" brochure to be mailed in February 2011. Requests for submittal binders can also be obtained in February 2011 by calling the CMACN office at (916) 722-1700, from our website at www.cmacn.org, or by e-mail at info@cmacn.org.

Tentative Schedule:
Last date to request submittal binders: March 31, 2011
Last date for postmark of completed submittal binders: April 30, 2011
2011 Concrete Masonry Design Awards Banquet: Friday, September 23, 2011

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 available.

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

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, CA 92316
Sun Valley, CA 91352

Basalite Concrete Products, LLC
(707) 678-1901
Carson City, NV 89706
Dixon, CA 95620
Sparks, NV 89431
Tracy, CA 95376

Blocklite
(a subsidiary of Basalite Concrete Products, LLC)
(559) 896-0753
Selma, CA 93662

Calstone Company, Inc.
(408) 984-8800
Galt, CA 95632
San Martin, CA 95046
Sunnyvale, CA 94086

Castlelite Block, LLC
(707) 678-3465
Dixon, CA 95620

CEMEX
(702) 643-1332
Las Vegas, NV 89115

Cind-R-Lite Block Company
(702) 651-1550
North Las Vegas Area
(702) 365-6955
South Las Vegas Area
Las Vegas, NV 89081

Desert Block Company, Inc.
(661) 824-2624
Mojave, CA 93501
Bakersfield, CA 93307

Oldcastle APG West, Inc.
(602) 302-9605
Needles, CA 92363

ORCO Block Company, Inc.
(800) 473-6726
Banning, CA 92220
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

Tri Delta
(a subsidiary of Oldcastle, APG West, Inc.)
(702)633-5787
North Las Vegas, NV 89030

Concrete Masonry Association of California and Nevada (CMACN) *a nonprofit professional organization established in 1977, is committed to strengthening the masonry industry in California and Nevada by providing:*

- Technical information on concrete masonry for design professionals.
- Protect and advance the interests of the concrete masonry industry.
- Develop new and existing markets for concrete masonry products.
- Coordinate 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