CMU Profiles in Architecture

This special issue features the winners of the 2000 Concrete Masonry Design Awards

Co-sponsored by
AIA California Council

CMU Profiles in Architecture is published four times per year and features projects which incorporate the use of concrete masonry units in their design. If you have not received this publication in the past and would like to receive future issues, please fax, mail, email or call us and we will include you in our mailing list.

Funding for CMU Profiles is provided by:

- Angelus Block Company, Inc.
- Basaltite
- Blocklite
- Calstone
- California Cement Promotion Council
- Crystalline Block Corporation
- Desert Block Company, Inc.
- McNear Brick and Block
- ORCO Block Company
- R C P Block and Brick, Inc.
- Valley Block Company

Concrete Masonry Association of California and Nevada
6060 Sunrise Vista Drive
Suite 1990
Citrus Heights, CA 95610
916 722.1700
916 722.1519 fax
www.cmacn.org

Co-sponsored by CMACN and AIA California Council
SAN FRANCISCO MUSEUM OF MODERN ART PARKING STRUCTURE
San Francisco, California

A tight site between two landmark buildings, a modest budget, a curious mix of uses including a future element exposed roof-top sculpture garden, were quite a challenge for a humble parking garage that must accommodate up to 413 cars. In order to create a structure that would serve as a supportive, respectful background to two monumental buildings and would maintain budget limits, the architects selected concrete masonry. The versatility of the material allowed the designers to take a modest stance, that does not mince, yet achieves the level of design befitting the "backyard" of the San Francisco Museum of Modern Art.

Concrete masonry also provided an efficient response to San Francisco's seismic challenges, using combined moment frames and concrete masonry shear wall structure. In addition, the solid-grooved CMU shear walls serve to maintain the required four hour fire-resistive separation at the lot lines.

At the pedestrian level the garage takes on the look and feel of neighboring retail – art galleries and cafes – with an embellished storefront. Simply detailed stonework displays showcase the museum's program graphics and provide display space for exhibits that meet the city's "one percent for art" stipulation. Awings and ornamental grillwork on the openings of the second floor add to the interest and pedestrian scale of the structure base.

ARCHITECT
Hornberger + Worstell, Architects & Planners
170 Mission Street, Sixth Floor
San Francisco, CA 94108

Mark R. Hornberger, AIA
Principal for Design

Paul Adamson, AIA
Project Architect

Rozan Gassan
Project Manager

Design Awards Jury comments:

"I like the simplicity of the design and the materials and the way it is contextual and blends into the background between two very recognizable buildings, very simply done."

"It's a fantastic use of the material for the building to be built in the City. It is a wonderful use of showing how concrete masonry units can be used for buildings such as this. It is very clean and very crisp, nicely detailed."

"I am impressed by the simplicity. I like how the corners are articulated with lights and recesses, very nice refinement to the design. There is definitely a pedestrian feel along the streets with the interiors being used as displays. The colors are beautiful. The darker colors of the CMU along with the color of this ramp not only gives it a distinct background, but it gives it a tie-in to the facility that it serves."
NED BAUMER-MIRAMAR COLLEGE AQUATIC CENTER
San Diego, California

This project called for a multi-use aquatic facility to be located on a gently sloping site adjacent to a community park and a community college. Design issues concerning durability, soils retention, the need for both straight and curving seawalls, the need to provide a secure and wind resistant enclosure around the pool deck, and a campus color scheme that required a warm gray as the base building color, made concrete unit masonry an ideal construction material for this project.

Windows, door and louver openings were designed to be uniform in size and to fit within the standard eight-inch masonry module as a means to reinforce the simple geometry of the buildings and the patterns established by the masonry. Horizontal raked joints and coved head joints were utilized to provide a subtle emphasis on the horizontal aspect of the wall texture without obscuring the vertical elements of the running bond pattern.

All unit masonry for this project was manufactured with an integral waterproofing additive as a barrier against internal and external moisture as well as the first step in an applied clear anti-graffiti coating system. In use, the masonry wall surfaces for this project have proven to be low maintenance and visually attractive, providing the warmth of appearance and a sense of permanence that is appropriate for this community-serving facility.

ARCHITECTS
ARCHITECTS Richard Bundy & David Thompson
713 J. Street, Suite 207
San Diego, California 92101

David C. Thompson, AIA
Principal
SAINT JOSEPH BALLET
Santa Ana, California

Located adjacent to the K authService at the “gateway” to the city’s museum district, the architectural design objective of this structure was to convey that “movement happens here” and recall the graceful elements of dance performance. That image is captured in the undulating concrete masonry surfaces of the building’s exterior walls, interior courtyard surfaces and metal roof planes. The interior volume of the second floor dance studios expresses lightness and movement through the use of clerestory windows and curved roof structure. The open-air entry courtyard creates a warm outdoor community space for the project, presenting an opportunity for the dancers, families and supporters to gather for celebrations and fundraising events.

Serving over 400 students, this new 22,000 square foot, two-story building is fulfilling its mission of helping low-income, ethnic youth to gain self-esteem, self-discipline and a sense of accomplishment through dance, academic and family services programs. It includes three dance studios, a community boardroom and an education center to provide counseling, parenting workshops, academic tutoring and computer training. To enhance its connectivity to its community, the owners and design team involved its young inner-city dancers on tours during varying phases of construction to instill a sense of ownership of this beautiful new building.

ARCHITECT
McLaren, Vasquez & Partners, Inc.
1900 Main Street, 8th Floor
Irvine, California 92614

Ernesto M. Vasquez, AIA
Principal

Design Awards Jury comments:

“This is a very stately building that has the expression of dance and motion and does a really nice job of using a very traditional material in the masonry to accomplish some very sophisticated and lively spaces inside. I love the how the roof form, blends with the sky, allowing the building to have a floating effect against the sky.”

“The building appears to have almost a movement in the way that it flows. The natural light is very nice. It’s a very inviting building. Floating effect against the sky.”
THE RON W. BURKLE FAMILY BUILDING
PETER F. DRUCKER GRADUATE MANAGEMENT CENTER
Claremont, California

The Drucker Center is a campus within a campus. As such, it is intended to reflect the Drucker School’s importance, maintain a casual quality of building and landscape consistent with the surrounding area, and to reinforce the intimate social community that defines the culture of the institution. It consists of administrative offices and lobby on the first floor, the Dean’s suite and faculty offices on the second floor, and state-of-the-art classrooms, conference rooms, and break-out rooms on the lower level. A library/study center is articulated as a separate pavilion, expressed in a grid pattern in the garden. This space is also a reception area for social gatherings. The exterior court at the lower level is a key program element and is intended to be the “heart” of the facility.

The site is organized as a building and a “garden.” The gradually sloping site is exploited by excavating the center and lowering the building to two stories on the street. The south elevation facing the court is the building front where the frame is fully expressed. The mullions separating the extensive glazing are expressed steel and wood, and act as an entry portico uniting the building and the garden court.

Exposed concrete masonry is used for site walls as the material lining the site excavation. The fragmented retaining walls and west wall of the study pavilion are of sandblasted “precision” block and are in contrast to the glass, steel, and plaster of the building volumes. All CMU walls facing into the court are the smooth finish with raked horizontal joints and flush vertical joints; walls facing outside are split faced. The natural gray color was chosen to recall the granite rubble walls found throughout the area.

ARCHITECT
Anshen + Allen
Los Angeles
5055 Wilshire Boulevard
Los Angeles, California 90036

Dennis McFadden, AIA
Principal
DATE ELEMENTARY SCHOOL  
Fontana, California

Date Elementary School was instantly nick named “The Castle” by the children who adopted the dragon as their mascot. From a child’s perspective it is a magical place, but it is a real place that is helping unlock the imagination of more than 800 preschoolers through sixth graders in a rough neighborhood. In addition to typical classrooms, the school houses preschool, day care, severely handicapped, and Healthy Start, which includes medical and dental facilities.

Security and a community gathering place were top priorities and a small site made for some unique design opportunities. A security tower for the school district police was designed into this facility. The mass of the concrete roof serves as a heat sink that conserves energy by delaying the time that it takes the heat to penetrate the roof. After the children leave for the day, the system is turned off. The cool nights cool the roof slab for the cycle to begin the next morning.

The many programs in the school generate the need for a large number of parking spaces. Rooftop parking solved the conflict between a small site and more than 100 required spaces. The elevated parking area became the battle of “The Castle” and material selection of load-bearing masonry walls and concrete became the stone walls. Even the rounded forms of the library and multipurpose room buildings surrounding the central plaza create similar images to the rounded towers and courtyards of the ancient castles.

Jury Comment: “The use of the simple concrete masonry unit in terms in how they used it impressed us. The uniqueness of the detailing is what attracted us all along.”

ARCHITECT

Ralph Allen & Partners  
520 North Main Street  
Suite 200  
Santa Ana, California 92701

Thomas Nusbickel  
Principal
ALMERIA MIDDLE SCHOOL GYMNASIUM
Fontana, California

The gymnasium building consists of an 8,000 square foot gymnasium and 1,800 square feet of support area. The Almeria Middle School was constructed in 1988 without these facilities and there was a need to complete the project fast and on budget. Masonry was chosen early on to adhere to these goals. Masonry also provided durability, flexibility, and afforded the design team with unique design opportunities.

Advantage was taken of the block color and modular sizes by mixes, colors, and sizes, which allowed the creation of shapes not usually seen in masonry structures. Mixing four colors randomly allowed the breakdown of the building's mass and made this school's addition approachable to the students. The building's vivid color scheme made the new gymnasium an instant hit with the students, and quickly became a center-point of not only the campus, but also the entire neighborhood.

Jury Comment: "I think this building is all about sculpture. It's all about the way this thing looks from the outside and I think it's studied very well and massed well. Those smaller forms surrounding the big forms really reduce the scale and make it understandable."

ARCHITECTS

HMC Architects
3270 Inland Empire Blvd.
Ontario, California 91764

Chris Taylor, AIA
Principal in Charge

Mark Schoeman, AIA
Project Designer

Chris Lawrence, RA
Project Architect
WINDSOR HIGH SCHOOL
PHYSICAL EDUCATION
COMPLEX
Windsor, California

The physical education complex is part of a new high school and forms one end of the school’s formal main quad. It serves to separate the school from the playing fields, which are used after school by the community and people from the adjacent park.

The complex has two main buildings with grass volleyball courts between them, which have steps cascading down into the main quad. The north building, which faces the public park, includes the main gymnasium, a prominent public entrance, locker rooms, team rooms and a community exercise room. The south building includes a multi-use pavilion used for wrestling, basketball practice and dance. It serves as an airy cafeteria shelter during lunch break.

Concrete masonry was selected for this project for several reasons. The image of permanence, conveyed by stone-like split-face masonry, is of symbolic importance for a new town’s first civic facility. The durability of concrete masonry solves the abuse and maintenance issues, while simultaneously providing inherently decorative finishes. Thirdly, extensive cost comparisons convinced us that concrete masonry was the most cost-efficient material for these buildings, while also providing attractive design possibilities for some very simple forms. Lastly, it provided a bold display of colors in glazed block for the prominent public entrance to the gymnasium.

Jury Comment: “I think that whenever you’re dealing with a campus situation you need to look at how these elements relate to one another. I think these two buildings do a very good job of addressing one another across this central mall space.”

ARCHITECT
Quattrocchi Kwok Architects
636 Fifth Street,
Santa Rosa, California 95404

Mark Quattrocchi, AIA
Principal

In association with
Dev Architects
CUCAMONGA COUNTY WATER DISTRICT  
Rancho Cucamonga, California

This project has three major considerations: to create an identity for a water district within its community; the programmatic requirements of a quasi-public building; and the semi-arid climate of the area.

With these considerations in mind, the building envelop was constructed of solid and veneer concrete masonry units of varying colors and textures which act to articulate the various forms while adding visual interest. The administrative portions of the building are constructed of red and black split-faced units. Curved walls which enclose the courtyard, break room, and mechanical enclosure are constructed of black "shot-blasted" units. Concrete masonry was selected for the project to take advantage of its durability, low maintenance, structural integrity, energy efficiency, adaptability to complex forms, economy and aesthetic options.

The programmatic spaces are separated into distinct public and staff components. On the north side, the public boardroom, training room and restrooms are housed under a roof formed to resemble a ripple of water. On the east side, the staff areas are organized into three modules, each with a roof designed to be reminiscent of a billowing sail. In the middle, anchoring the building, is a canted, curving limestone clad lobby, which acts as a connecting link and is meant to recall a dam, as well as a wave. The resulting space between the building components creates an intimate courtyard.

Jury Comments: "This one struck me as having some really interesting animated massing to it. The colors and different roof forms are playful."

ARCHITECT

Williams Architects, Inc.  
276 N. Second Avenue  
Upland, California 91786

Max E. Williams, AIA  
Principal

Rene Glynn  
Designer
TARBUT V’TORAH COMMUNITY DAY SCHOOL
Irvine, California

Tarbut V’Torah Community Day School serves as a focus for Jewish community life in the Orange County area. Contained within a landscape framework, the K-12 private school is a "biblical garden" within its surrounding rural context. The school evolved to become a metaphor of the old city of Jerusalem.

The resulting campus boasts four learning villages representing the quarters of the old city. They surround a quad, or temple mount, where the most important ceremonial buildings for physical and spiritual activities are located. Pedestrian circulation flows along alleys and courts that are formed between the buildings. The multi-purpose/library building is prominently placed and is used as both an educational facility and synagogue.

Completing the building complex plan is an angled concrete masonry wall serving as a reminder of the Wailing Wall. Its angle sets it apart from the orthogonal campus composition, implies movement, and forms the “torah gate” at the entrance to the school. The wall was designed so that blocks decrease in size as they reach the top, just as the original wall in Jerusalem was constructed. The wall is double width and recessed cove lighting sets off the interior. Split-face masonry units with deep mortar reveals create interesting shadow patterns when up lit at night.

Jury Comment: “The sculptural effects of the wall and the organization that it gives to the plan is really good.”

ARCHITECTS

LPA, Inc.
17848 Sky Park Circle
Irvine, California 92614

Jim Wirick
Principal in Charge
KENNEDY SENIOR HIGH SCHOOL
ADMINISTRATION AND CLASSROOM BUILDING
Granada Hills, California

As a result of the Northridge, California Earthquake of 1994, the existing administration and classroom building of Kennedy Senior High School was in need of replacement. The school district commissioned a new building and mandated that it harmonize with the existing 1960's campus, while providing a more welcoming character to students and community. This 44,000 square foot structure is the campus entrance. This project houses all administration, counseling, dean and nurse's offices, as well as 15 classrooms, a dry-lab, and a technology center for the 180,000 square foot, 40-acre campus.

Through the use of burnished CMU punctuated every six feet vertically by bands of four-inch split-faced block, the design matches the existing campus colors and scale, while creating a "new" image. The burnished CMU provides a legible, significant presence to the design, while creating a durable facility. Another significant use of CMU is in the colonnade; an arcade has been created, linking this new building to the existing covered walkway system of the campus.

Jury Comment: "One of the things I liked about this project was the simplicity of the plan. There are squares and rectangles with animation to the facades by the virtue of cutting pieces out, punching windows into it and I think it's done not in a thoughtless way, but in a careful, planned, methodical way and I think it's very strong because of that."

ARCHITECT

R.L. Binder FAIA
Architecture & Planning
7726 – 81st Street
Playa del Rey, California 90293

Rebecca L. Binder, FAIA
Principal

Kim Walsh, AIA
PECK PARK GYMNASIUM
San Pedro, California

The Peck Park Gymnasium provides a full court gymnasium with 500-seat bleacher seating, locker rooms, bathrooms, and kitchen/concession stand in a well-used park in San Pedro. The 12,500 square foot building entry fronts the access road into the park. The building is located over an existing water drainage swale, (a portion of the park that was not usable) to avoid consuming usable play space or parking area.

From the front door of the building, an expanding spatial sequence leads into the voluminous gymnasium. Natural light is used to emphasize the single masonry forms. The long east and west focus of the building brings together the two colors of block (the beige block comprises three colors of beige tone block to achieve the warmth of tone). The resulting checkerboard of red-hued and beige-hued block forms a graphic backdrop to the park. Our interest in graphic use of masonry continues to evolve. Patterning, it seems, changes the evocative perception of a simple budget-conscious building material.

ARCHITECT

Koning Eizenberg Architecture
1454 – 25th street
Santa Monica, California 90404

Hank Koning, FAIA, FRAIA
Principal

Julie Eizenberg

Jury Comment: “It’s a fun building, but it’s almost taking a utilitarian’s kind of space, and not only making the space fun and interesting from the outside, not only from the entrance, but its a very simple solution, with the roof sitting on top of the masonry box. And yet at the same time thought was given to the light, the center and along the sides, and I think by taking the box and just by the use of color, the color adds a lot of character. The roof structure pulls everything together.”