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FEATURED PROJECT

UCSD Student Services

The new UCSD Student Services Center, designed by Rob Quigley Architects, and landscape design by WRT Design gathers existing UCSD student services into one central location. Located next to the Student Union at the heart of the campus, the building is intended to enhance, define, and connect the three major campus quads adjacent to the site. Quigley's design utilizes continuous outdoor loggias and an STF Porous Concrete ground floor plan to encourage campus cross-circulation and help shape the adjacent quads and courtyards. The first floor of 9,500 square feet of integrally colored open-air porous concrete plaza and walkways allows students to pass through and under the L-shaped building.

Another green feature of the project is the HD concrete flooring featured in its "Multipurpose Room." The highly reflective floor adds to the brightness of natural light through the large tall windows of the building, minimizing light energy consumption. Polishing the existing concrete also provides value in that it eliminates the need to bring in a secondary floor covering, thereby saving time, reducing expense, and defraying total resource usage. Highly energy efficient and sustainable, concrete is a key construction material for those striving to build green. The usage of concrete reduces energy consumption by reflecting sunlight and utilizing thermal mass for natural heating and cooling.

As an environmentally sensitive structure, the Student Services Building should meet LEED (Leadership in Energy and Environmental Design) building standards. However, UC chooses to "self-certify" its new construction rather than go through the program.
The Regents of the University of California adopted the "Policy on Green Building Design and Clean Energy Standards" to promote sustainable practices at all UC Campuses. At UCSD, departments collaborate to design, renovate, and construct buildings that meet or exceed these standards.

TB PENICK WELCOMES DEBRA O'LEARY

T.B. Penick recently added Debra O'Leary as project developer to our Innovative Concrete Systems team. Debra began her career in landscape design and installation and eventually moved into the field of architectural concrete. With more than 25 years experience in the field of both interior and exterior architectural concrete, Debra's in depth knowledge is an invaluable asset for landscape architects, architect and designers.

Debra's past projects include: Petco Park, San Diego Zoo's "Monkey Trails", Gaslamp Hilton, the Veterinary Hospital at the San Diego Wild Animal Park,

Sea World's "Shamu's Happy Harbor" and "Shipwreck", Four Seasons Aviara, and Friendship Plaza Border Crossing.

She is a member of the American Society of Lanscape Architects, American Society of Interior Designers, American Institute of Architects, Associated General Contractors, American Concrete Institute. For personal interests, Debra enjoys spending time with family, gardening, music, swimming, reading, and her pet bunnies and tortoises.

RESPONSIBILITY FOR MOISTURE TESTING CONCRETE FLOORS

ASCC Decorative Concrete Council Position Statement #7

With the growing need to resurface existing concrete floors for commercial and retail environments, the moisture condition of these floors is becoming an important issue for concrete overlay installers. Often times these floors will receive an acid stain treatment or a smooth or textured overlay. Care must be taken when choosing the proper sealer or protective coating, as certain types of coatings result in moisture sensitivity similar to that of some resilient floor coverings. Typical acceptable moisture conditions for those types of applications are 3-5 lbs. per 1000 sq. ft. MVER (moisture vapor emissions rate, ASTM F1869) or less than 75% relative humidity7 (ASTM F2170). When moisture testi9ng is overlooked, problems may result and expensive repairs may become necessary.

Excessive floor moisture can cause problems with decorative concrete that include the following:

- Increased efflorescence and discoloration on the surface
- Debonding or delaminating of overlays or coatings
- Whiting or blushing of sealers
- Formation of bubbles or blisters in coating or coverings

Moisture testing should be discussed during a pre-conference meeting to include the following points:

- Slab history, construction and curing, sub-slab vapor barrier installation
- Responsibility for moisture testing
- Appropriate moisture test method (AQSTM F1869 calcium chloride test, F2170 relative humidity test, or other method recommended by manufacturer)

- Acceptable moisture conditions for material application
- Surface preparation method and its effect on floor moisture
- HVAC operations, ambient air relative humidity and temperature

No matter who is responsible for the testing, the subcontractor or the owner, the subcontractor should have input into the test method, the frequency of testing and acceptable moisture levels, prior to the bidding process. To ensure a quality project, all parties must work together to facilitate proper testing and preparation.

Sincerely,

Christina Palpal-latoc, LEED AP
T.B. Penick & Sons, Inc.