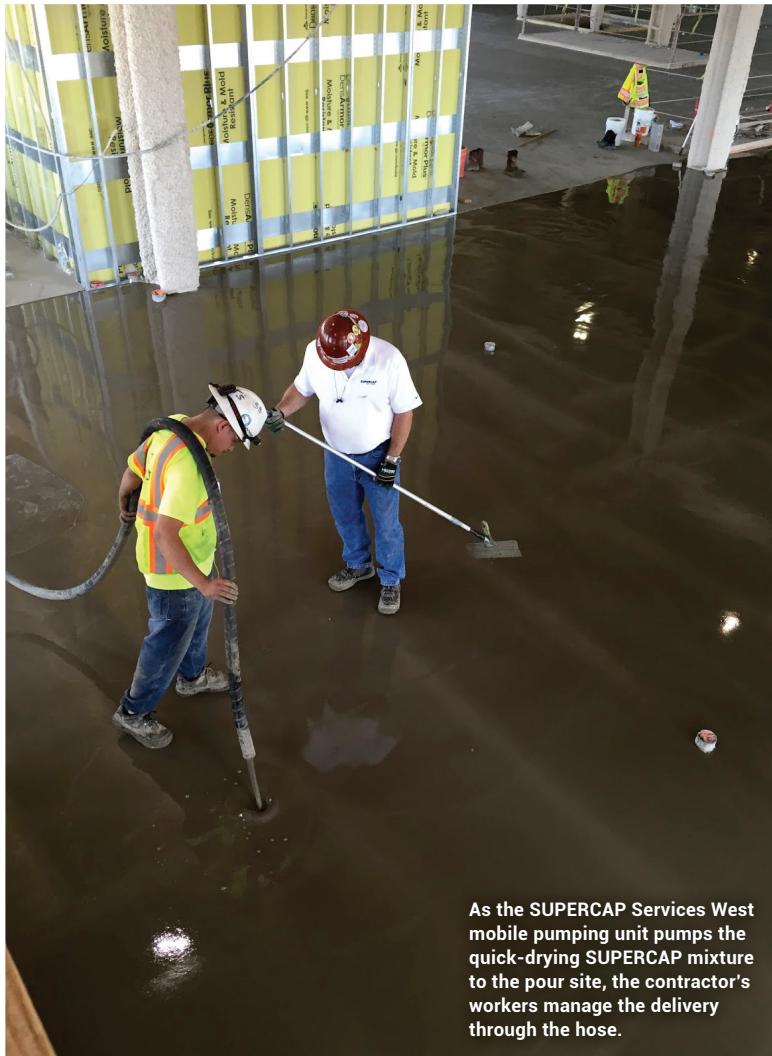


THE NEW POUR

SUPERCAP Services West offers 'Perfectly Flat Floors. Delivered.'

by Ralph Fuller



As the SUPERCAP Services West mobile pumping unit pumps the quick-drying SUPERCAP mixture to the pour site, the contractor's workers manage the delivery through the hose.

When SUPERCAP Services West (SUPERCAP West) shows up to pour quick-drying, self-leveling SUPERCAP cement for floor underlays in building projects, construction managers can count on three things, says Ben Timmerman, SUPERCAP West Principal:

- The work will be done quickly and efficiently, typically pouring as much as 50,000 square feet of new, extremely flat subfloor in a single day.
- Electricians, plumbers and other tradesmen can walk on the new surfaces to start the next stages of the job the following day.
- They'll save a great deal of money.

For general contractors focused on erecting new buildings or renovating old ones, putting down a compressed cement subfloor, or underlayment, is an essential step before a topping of tile or other material can be installed.

The arrival of SUPERCAP's advanced mobile mixing services on the West Coast means an end to contractors having to get 50-pound bags of dry concrete to each floor for hand-mixing on the spot, to tying up as many as a dozen workers in the pouring and leveling process, to waiting days for the surface to harden and to further delays due to change orders.

"SUPERCAP technology brings a self-contained mobile batch plant to the site," Ben says. "We can pump innovative Laticrete SUPERCAP cement through our hose up to 50 stories above ground, create absolutely flat floors that are ready for regular foot traffic within 12 hours and shorten contractors' schedules by weeks.

"It's clean and GREENGUARD certified," he adds. "It doesn't generate clouds of silica dust, so it's suitable for use both in new builds and in renovations, where the work might be in enclosed spaces."

A FIRST FOR THE WEST COAST

Established as a distribution company for Laticrete SUPERCAP products just this spring, SUPERCAP West brings to the region a capability developed by Connecticut-based Laticrete, LLC, which manufactures a broad range of adhesives, mortars, grouts, sealants and concrete compounds. It has manufacturing plants in seven states and 15 countries and sells products in some 150 countries worldwide. Although it had developed SUPERCAP cement some time before, it perfected its Mobile Blending Unit technology—its "pump truck" system—about a decade ago.



SUPERCAP Services West Principal Ben Timmerman has operated the floor preparation companies Blason Industries and American Concrete Polishing LLC for two decades.

The SUPERCAP technology has been used on some projects in the western United States, but its predominant use has been in the eastern U.S. The new SUPERCAP West company is Laticrete's first dedicated SUPERCAP distribution point in the western part of the country, set up to provide services to clients from Colorado to California, San Diego to Seattle.

"Laticrete's SUPERCAP line had a sporadic presence on the West Coast, and they approached us more than a year ago with the prospect of a partnership," says Ben, who has operated the floor preparation companies Blason Industries and American Concrete Polishing LLC since 2000. "Although Laticrete was

established more than 60 years ago, it's still a family company and they're very good people. And, it's an exceptionally good product. We decided this would be a successful way to work with the industry."

Adds Matt Dvorak, SUPERCAP West's Business Development Director, "As much in the field as we are, at bottom we're essentially product distributors—even though the product is processed by us on-site. We deliver a unique product wet out of the hose onto a structure's floors. We have technicians communicating with the MBU (Mobile Blending Unit) from the pour floors, but the people doing the actual installation are the general contractor's or tile installer's workforce."



At a job site, SUPERCAP Services West Principal Ben Timmerman heads for a meeting with a contractor.

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BIG TRUCK, NO. MOBILE BLENDING UNIT, YES.

Laticrete SUPERCAP—the product—differs from Portland cement-based materials. The company describes it as a polymer-modified engineered, low-alkali, self-leveling cement, a calcium aluminum material that is more stable than conventional concrete products. They say it requires less water to mix, is water repellent and has very low shrinkage properties.

At first glance, the vehicle that does the production just looks like a very large box truck with a long, articulated-arm crane attached. Actually, it's a complex, computer-controlled portable factory, the patented MBU developed by Laticrete for mixing and delivering SUPERCAP.

Implementing a pour begins with the arrival of flatbed trailers bearing 2,500-pound "super sacks" of SUPERCAP binder and fine sand aggregate material—the equivalent of 106 50-pound bags of conventional cement.

Enter the MBU, its promise emblazoned on its side: "Perfectly Flat Floors. Delivered." In addition to its long-arm crane, the 50-foot vehicle has an on-board electric generator, a water supply system, dual rotor stator pump systems and 660 feet of 3-inch hose. And, of course, the patented blending machinery, with dual silos into which the crane releases the sacks of binder and fine sand. It's all computer controlled, from the crane to the blending to the pumping. It can continuously handle as much as 15 tons of material an hour.

"We typically start pumping 90 minutes after arriving at the job site," Matt says. "When it's delivered wet on the floor out of the hose, SUPERCAP SC500 has little viscosity. It works around the floor, fills the low spots, and settles into an extremely level surface." Usually, the contractor has used a laser to set elevation pins on the substrate to indicate the level of pour desired.

OLD WAYS AND NEW

"The old way of doing underlayment would be for the contractor's workforce to lug pallets of 50-pound bags to each floor, mix the material there and pour it in," Ben notes. "Installations can be a long process, often requiring 10 to 12 workers and two to three days."

Hardening to the point that following trades could begin working on it would take days. Sometimes change orders are called for to rework the surface, resulting in more delays.

"With SUPERCAP," Ben says, "depending on the thickness required, six workers can pour up to 70,000 square feet a day. The surface is cured enough for light foot traffic in a few hours and ready for full contractor traffic in 24 hours."

SUPERCAP options encompass more than the basic SC500 blend. SC500-PLUS is a variation with increased compression strength, as might be needed for a factory floor, for example. SC500-LW is a blend for use where lighter-weight pours

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may be needed. All are underlays designed to support finishes like tiles, slate or other floor coverings. Additional products include sealants for moisture control and decorative applications.

With bare concrete floors the new style for big box stores and factory-converted apartments, SUPERCAP SC650-MC can be polished and provided as a topping that can be buffed to the highest sheen within days of being installed. This overlayment provides a beautiful finish that will last the life of the building.

CONSTRUCTION PROJECT BENEFITS

"It's impossible to overstate the advantages SUPERCAP SC materials offer to general contractors on their projects," Ben says. "Compared to the old methods of building flatter surfaces, the ease with which SUPERCAP can be prepared and delivered saves enormous amounts of time and money.

"Less labor is required for installation, the entire process is much faster in itself, surfaces are uniformly flatter and SUPERCAP's fast-drying



Following a pour by SUPERCAP Services West, a new underlayment can handle light foot traffic in a few hours and full contractor traffic in 24 hours.





Only a half-dozen or so workers are needed to pour large areas of the self-leveling underlayment delivered by SUPERCAP Services West.



As Business Development Director, Matt Dvorak works with construction managers and architects to organize the company's services on their projects.

qualities allow follow-on trades to get to work on a much tighter—and predictable—schedule."

Work done in 2014 for Swedish Health Service's medical center in Issaquah, Washington, underscores the benefits, according to the Laticrete website. An analysis of the project by general contractor Sellen Construction found the use of SUPERCAP services played a significant role in completing the project four months ahead of schedule and nearly \$8,750,000 under budget.

NOT FOR ALL PROJECTS—BUT BIG ONES!

Considering the West Coast's somewhat shaky relationship to earthquakes and building techniques that often skew to wood-framed structures, Matt says that SUPERCAP technology isn't right for every type of building.



With computer-controlled precision, the SUPERCAP Services West mobile blending unit mixes SUPERCAP binder and aggregate on-site and pumps it directly to the floor being poured.

"SUPERCAP," he says, "works best with brick and concrete structures—buildings where floor flatness is an absolute necessity, like skyscrapers, hospitals, schools, hotels, convention centers, stadiums and the like."

"When utilized on the right projects, SUPERCAP shortens construction schedules, is cost-effective and

provides superior quality. It's a triple win for owners, contractors and the environment." ☺

Freelance writer Ralph Fuller has more than 30 years' experience explaining topics as diverse as rare tropical diseases, alternative fuels, highway safety technologies and the fishes and critters on coral reefs.