ORANGE PEAL

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Newsletter of the Orange County Chapter, Construction Specifications Institute

www.occcsi.org

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SAVE THE DATE

February, 2021

Membership Meeting

OCCCSI MESSAGE

Anonymous

President David Brown is relaxing at home. We had an anonymous former President volunteer to write this article for the column.

OCCCSI Message - The Phoenix

According to Ancient Greek Mythology, a Phoenix was a bird that cyclically regenerates itself or is otherwise born again. Associated with fire and the sun, the Phoenix obtained new life by rising from the ashes of its predecessor. Some legends have said that the Phoenix dies in a show of flames and combustion, while other legends say that the Phoenix simply dies and decomposes before it is born again. In its simplest form, the Phoenix symbolizes renewal.

And, so it is for all of us over these last 9 months.

Everyone of us… as members of our own Individual Family, as members of our Work Environment, as members of the CSI Family, as members of our Individual Communities, as members of the United States of America, as members of this Planet we call home, as members of God's Community here on earth… we have all been affected and changed by Covid-19 in ways that will never be completely measured, dealt with or understood. Each one of us have been irreparably altered by those individual experiences, that will now modify 'how' we live as long as we remain on this planet.

It is a mutually shared experience of life that should bring us all closer together… not tear us apart, as our current political environment tends to dictate.

We have yet to determine and know what the 'new normal' will look like…

We have a long way to go, before we get to the 'new normal'…

We only have each other – as family – to make it through these trying times together.

Let us together as one arise, from the funeral pyre which contains the ashes of our past lives before Covid-19, to the new freshness of youth, where we can live through the cycle of our years as an emblem of reborn idealism and hope in today and the future. Giving into our better angels. Thinking and striving only for what is best for our fellow human. Remembering to take in and enjoy the simpler things of life. Leaving behind the inhumanity we place upon our fellow human. United in our purpose to make this world better than we found it.

It will not be easy, but we can do it… if we work extra hard to achieve the goal of making our world a better place to be.

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WREN'S WESTERN OUTPUT

Up in Flames

By Annette Wren, FCSI, CDT

Do you know that our wildfires in the west are still alive and well? My office has a fine view of the Creek Fire in the high Sierras. In November, evacuation orders are still pending since the lack of moisture and tremendous winds are keeping the fire alive. Who is at fault?

There is plenty of blame to go around for our situtation. The Green movement (Sierra Club, Bureau of Land Management, "environmentalists", etc.) bears MOST of it. These entities have not protected our forests as they profess. They blame it all on global warming. Not! They are responsible for allowing forests to be devastated by wildfires through their powerful lobbying efforts. They have used the courts to stop timber harvesting, cutting of dead trees, underbrush clearing and controlled burns. They want to "save trees" and allow dead trees to fall and "go back to nature". When bark beatles started to devastate trees in the forests, they continued to get legislation to prevent responsible forest management practices. The hikers here in the high Sierras can see that about every third tree is dead of bark beatle. We are witnesses to the flawed efforts of the "greenies".

Some politicians like Senator Feinstein tried in the early 2000's to modifiy this situation. She had a responsible plan to thin forests and expedite permits to cut trees. The powerful green movement lobbiests were able to thwart her efforts. In 2002, a newspaper headline read "Sen. Feinstein blames Sierra Club for blocking wildfire bill". Senator Feinstein's warning about mismanaged forests was ignored. We are now witnesses to the manifestation of flawed efforts by the "greenies".

Forty years ago, national forests had proven forest management practices. Unfortunately, we now have a policy of neglect to let nature do what it may. Laws and regulations enacted by the greenies in our land management agencies prevail. Irresponsible managers in these agencies have been produced by our education system. For years the Green movement encouraged our public school system to teach our school children that we need to save trees. Teachers created little zombies marching around with the mantras and signs about saving a tree. Really? Where is the responsible education about maintaining the integrity of forests? Where is the common sense that our air and water will be impacted by irresponsible practices?

And finally, do you know that the unmanaged forests reduce our water supply? The same "greenies" are all about saving water yet they push initiatives that endanger our forests, air and water. In real time, here is how one of these folks react: In the face of the increasing Creek Fire, my neighborhood turned on all the irrigation at our cul-de-sac. We were about to be evacuated and wanted to water our property. We had large chunks of ash falling, the smoke was a thick fog choaking humans and animals, and the visible sky was red. It felt like Hell!. Not to worry, our neighborhood "greenie" came running out of her house to order us to shut off the irrigation and not waste water. The neighborhood reacted. Unfortunately, she is still alive.

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BUCH NOTES

By Ed Buch, FCSI, CCS, AIA, LEED AP

Michelangelo, God's Architect

By William E. Wallace

Most of us know Michelangelo for his magnificent fresco on the ceiling of the Sistine Chapel at the Vatican or his sculpture of David in Florence. These and his other most well known works were completed early in his long life, before he turned 40 years old. But at that point he was just getting started. Michelangelo, God's Architect is the story of the last 20 years of his life, an amazingly productive period beginning when he turned 70. It was during this time that he designed and managed a significant portion of construction of St. Peter's Basilica in addition to working on a dozen other major architectural projects in Rome and several important sculptures.

Michelangelo Buonarroti was born in 1475 and grew up in Florence at a time when Leonardo da Vinci was at the height of his artistic life and where the Medici family was still influential politically and artistically. In 1505 Michelangelo was given the commission to carve the sculptures to adorn the tomb of Pope Julius II. This eventually took him to Rome where he lived the rest of his life. The statue of Moses was the principal feature on this two story high tomb that took nearly 40 years to complete. When it was done, Michelangelo was 70 years old, healthy, wealthy, and looking forward to slowing down when Pope Julius III insisted that Michelangelo come to work as his architect. The most important of his many assignments would be the completion of the New St. Peter's Basilica.

The original St. Peter's was over 1,000 years old and in disrepair when Pope Julius II had it demolished in 1505 and new construction began using the design by architect Donato Bramante. Upon the death of Pope Julius II in 1513 Bramante was replaced by architect Antonio de Sangallo. Sangallo made significant changes to Bramante's design and, had they been implemented, would have destroyed the Sistine Chapel and Michelangelo's ceiling in addition to making major alterations to Bramante's design for the Basilica. Fortunately, upon Sangallo's death in 1546, work on his design was stopped and in January 1547 Michelangelo was appointed Architect of St. Peter's Basilica by Pope Paul III.

Michelangelo first had to undo 40 years of deficient work and remove much of the construction that had taken place since Bramante's death. In this process he also had to deal with the corrupt Vatican bureaucracy, the "fabbrica", that had much invested in continuing the construction as designed by Sangallo. He also had to make important changes to the deficient structure in Bramante's design that would be necessary for support of the dome over the crossing in the Basilica. Michelangelo understood construction and took charge of the project. He introduced many improved construction methods and enforced worker discipline on the site. Among these improvements were: establishing regular work hours six days each week, improved hoisting equipment designs, refusing to accept inferior materials, improving the stone cutters techniques so they could produce cut stone faster, and most importantly, he established a standard unit of measure for use across the entire project, the "braccio". All of this was in addition

(continued on page 29)

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IF STEEL IS GOING TO BE COATED, A ZINC-RICH PRIMER IS A BETTER OPTION THAN GALVANIZING.

Presented by: Tony Hobbs - Tnemec Company Inc.

The best possible corrosion protection on steel is to have it coated with zinc. Both galvanizing metal and shop-applied zinc-rich primers are processes that provide superior corrosion protection for steel. Both provide an amount of zinc needed to promote electrical conductivity to provide corrosion protection.

However, when it comes to applying high performance coatings to galvanized steel, the process becomes very difficult.

Tnemec, in accordance with the American Galvanizers Association, would like to highlight some of the complexities when painting galvanized steel with paints and high-performance coatings:

YOU MUST KNOW THE AGE OF THE GALVANIZING

Knowing the age of the galvanized steel prior to painting is important because age determines what type of surface preparation is required. Zinc oxide and hydroxide hinder the paint's ability to adhere to unaged galvanizing. However, over the course of six to 24 months the zinc surface weathers and forms a thin, dense film of mostly zinc carbonate called the zinc patina. Once the patina has fully formed, the particulates no longer interfere with paint adhesion. Galvanized coatings can generally be grouped into three categories: newly galvanized, partially weathered, and fully weathered. The length of time a galvanized coating takes to reach each age level depends on environmental conditions, such as humidity, temperature, wind, etc.

INSPECT THE GALVANIZED STEEL

Chromate Testing Sometimes galvanized steel is dipped in a chromate bath immediately after galvanizing. The chromates can greatly interfere with paint adhesion and must be removed prior to painting. Although, some chromated galvanized surfaces have a dull, flat gray finish, it can be difficult to visually detect the use of chromates. If there is uncertainty on whether the steel was chromate quenched, then the galvanized surface needs to be tested for the presence of chromates. This testing is fairly simple and is described in ASTM B 201. If chromates are found, the galvanized steel can either be allowed to weather for approximately two years before painting or the chromates can be cleaned off using one of the cleaning methods described in the next step.

Surface Imperfections Regardless of the age of the galvanized coating, it should not have significant bumps, sharp icicles, high spots, or extremely rough edges. This is important because protrusions greater than the paint's dry film thickness (five-ten mils) interfere with adhesion and can cause voids in the paint coating. To smooth out surface blemishes, hand-file or power-sand the area. Be very careful not to remove any more of the protective zinc coating than absolutely necessary.

Continued...

TNEMEC

CLEANING THE GALVANIZING

Newly Galvanized Steel No dirt or grease present. Few zinc oxides and hydroxides formed. No major cleaning necessary.

Partially Weathered Galvanized Steel Remove surface oxide and hydroxide film, as well as dirt and grime.

Fully Weathered Galvanized Steel Requires minimal cleaning, such as a warm water power wash to remove contaminants from the surface. Power wash should not exceed 1450 psi.

NOTE: The goal of surface cleaning is to remove the grease, dirt and oils from the galvanized surface in order to promote paint adhesion. If it is determined the galvanized surface needs to be cleaned, any of the methods listed below can be used. Remember, a cleaning solution is meant to clean the zinc surface, not remove it. Some cleaners may react poorly with certain paint systems. Be sure to consult the paint manufacturer regarding specific cleaning instructions.

Alkaline solutions in the pH range of 11-12, but not greater than 13, (dilute sodium hydroxide, trisodium phosphate or similar solutions) can be sprayed at a temperature ideally between 140°F and 185°F. If the solution is brushed on, use a nylon bristle brush — not copper or steel. After cleaning, thoroughly rinse with hot water and allow to dry completely.

Solvent cleaning (mineral spirits, turpentine, high-flash naphtha, or similar solvents) should be used only if they can be applied with lint-free rags or soft bristled nylon brushes. These rags and brushes must be changed frequently to avoid the respreading of contaminants. After cleaning, thoroughly rinse the surface with hot water and allow to dry completely.

Ammonia cleaning, which should be used in a solution of one to two percent ammonia, is usually only used when ash residue from the galvanizing process is present. Apply the ammonia solution with a nylon brush. After cleaning, thoroughly rinse the surface with hot water and allow to dry completely.

Thorough rinsing ensures that leftover residue from the cleaning solution will not interfere with paint adhesion.

SURFACE PROFILING

Sweep Blasting The most common way of profiling galvanized steel. Particle size for a sweep blast of galvanized steel should range between 200 and 500 microns (8-20 mils). Aluminum/ magnesium silicate can be used to sweep blast, as can many types of natural media like corn cobs, walnut shell, corundum, limestone, and mineral sands with a Mohs hardness of five or less. Conditions for sweep blasting are recommended to be less than 50 percent humidity and a minimum of 70°F. Consult SSPC Surface Preparation Specification 7 for sweep blasting procedures.

Overblasting When the galvanized coating is overblasted, too much zinc is removed. Because the zinc protects the steel from corrosion as the paint wears away, the steel will rust if the zinc isn't there to protect it. If this is the case, then the system will fail. To avoid this problem, be sure to use the correct media for sweep blasting galvanized surfaces, and do not blast in one area for too long.

Continued...

TNEMEC

USING PRIMERS WITH PREPARED GALVANIZED STEEL

After cleaning and profiling the galvanized surface, a primer coat is often used to help with paint adhesion. Many types of paints react poorly when applied directly on prepared galvanized surface. Primers allow for the successful use of many of these paint types. Zinc-rich coatings have a great track record and can often be used as a primer. Priming of galvanized surfaces should be done as soon as possible after cleaning and profiling. Because the zinc in the galvanized steel continually reacts with the environment, zinc oxides and hydroxides begin to build-up right away and can cause paints not to bond. Always apply primers according to the manufacturer's directions and specified paint system.

APPLYING THE COATING SYSTEM TO PREPARED GALVANIZED STEEL

The paint manufacturer can provide more thorough information about the compatibility of specific systems with galvanized steel. Always consult the paint manufacturer prior to painting galvanized steel. Different physical and chemical characteristics for the same types of paint may have varied reactions with a galvanized surface.

NOTE: Some manufacturers suggest the following for their primers which are specifically designed to paint galvanizing: *Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments.* These primers have been used with inconsistent results. And because of VOC restrictions, many are no longer available.

Paint Thickness When paint is not applied to the manufacturer's recommended thickness, the Architecturally Exposed Structural Steel (AESS) system can fail. Too thin of a coating, and the paint will wear away quickly.
Too thick of a coating, and the paint may not cure correctly and cause adhesion problems. Always follow the manufacturer's directions for application.

CONCLUSION

Obtaining a successful coating project when applying coatings over hot dipped galvanizing can be challenging. When you compare all of the procedures, inspection, testing, cleaning, profiling, etc., with the application of a shop-applied zinc-rich primer, the choice becomes clear. Unless the galvanizing is not going to be coated, the better choice is to use a zinc-rich primer.

In addition, the welds of galvanized steel (which are the most prone to corrosion) are touched-up with zinc. If the critical areas of galvanized touch-up use zinc, doesn't it make sense to prime with zinc?

Tnemec Company suggests the following:

SURFACE MUST BE CLEAN AND DRY

Prior to field painting the shop applied zinc-rich primer, all surfaces to be coated shall be clean, and dry. No additional surface preparation is required.

NOTE: For surface preparation and coating system recommendations when applying coatings over galvanized surfaces, please contact your local Tnemec Representative.

OCCCSI Fiftieth Year Anniversary Gala 2015

Photos by Jennifer Fedrizzi

OCCCSI Past Presidents: (l to r) Kim Claus Grosch (1996-1997), Bill Sharp (1975-1976), Frank Dave (1979-1980), Mark Niese (2001-03, 2006-08), Royce Wise (1999-2001), Jerry Staake (1991-1993), Pete Thomsen (1998-1999), Jackie Carr (1995-1996), Gary Kehrier (2003-2006), Annette Wren (1983-1985), & David Lorenzini (1985-1986).

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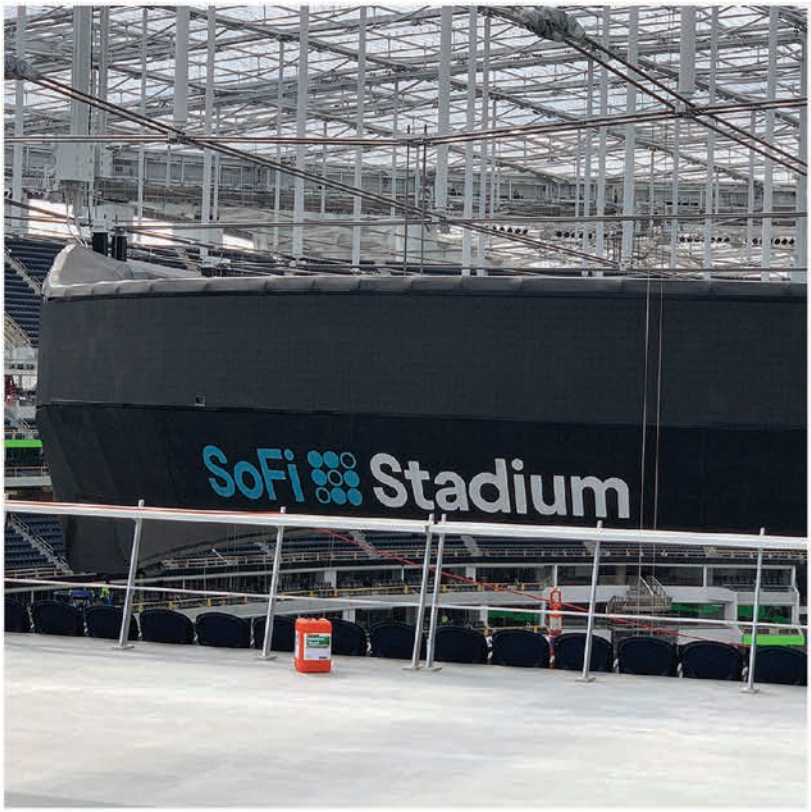
Protecting the new star of SoCal

It's on display for millions of Americans every Sunday this time of year, plus a few Monday and Thursday nights, and the only stadium called "home" by two NFL teams (the Rams and the Chargers). It is Sofi Stadium in Inglewood, Calif., and it would be a colossal site to behold even if it stood alone.

However, Sofi does not stand alone. This 70,000-seat stadium is just a portion of the $5 billion-plus, 300-acre Hollywood Park, an indoor-outdoor complex also housing the NFL Network headquarters and studios, townhomes, apartments, a hotel, office space, more than 1.5 million square feet of retail space, restaurants, beautiful landscaping, a 25-acre park, a 6,000-seat performance venue and more.

To protect and treat so much square footage of concrete and other hardscapes, contractors chose PROSOCO, a national manufacturer of cleaners, water repellents, air barriers and concrete densifiers that have been no stranger to the unique design considerations of sports venues and Southern California projects. PROSOCO products have been used on such high-profile professional sports arenas like the Golden 1 Center for the NBA's Sacramento Kings, Dodger Stadium in Los Angeles, T-Mobile Park in Seattle, as well as highly recognized projects in Southern California such as Our Lady of Angels Cathedral, both Getty Museums and Walt Disney Concert Hall.

On approximately 500,000 square feet of concrete floor on the concourse plaza and interior walkways of Sofi Stadium, **Consolideck LS/CS** densified and hardened the surface, while **Consolideck LSGuard** was used to protect it.



Elsewhere in the complex, cast-in-place concrete paving was installed, featuring a decorative, exposed aggregate finish. Protection from food and oil exposure was an easy value-add option, given the investment. To do so, crews applied **Concrete Protector WB** to more than 660,000 square feet of concrete site paving.

In the name of protecting these valuable surfaces from potential graffiti attacks, a non-sacrificial graffiti protective coating called **Blok-Guard & Graffiti Control II** was applied to around 25,000 square feet of exterior decorative concrete walls between the stadium and adjacent surface streets, and 33,000 square feet of precast concrete panels on the NFL building.

All products were carefully vetted and selected for their effectiveness and compliance with green building standards of Southern California.

For more information, contact PROSOCO at 1-800-255-4255. www.PROSOCO.com.

Maximizing Cladding ROI In Investment Properties

Selecting Performance Drivers

Designers consistently report the single most important decision factor driving cladding selection is up-front installation cost. While this helps keep construction cost low, it increases maintenance and operations costs and results in a lower return on investment over the life of the asset.

What selection criteria can be used to increase asset return while keeping construction costs in check?

Choosing the right cladding materials comes down to selecting materials that will deliver the desired performance while meeting the aesthetic requirements, at the lowest price.

Understating the desired facade performance often leads to the selection of lesser quality materials because these materials tend to install at the lowest cost.

Building envelope design should start with establishing the desired balance between expected service life and desired maintenance requirements. These two key criteria allow the designer to properly select an envelope that meets both the design and performance requirements.

17 years old and still looks brand new due to the protective, factory applied coating that blocks harmful ultraviolet rays.

ROI DRIVERS

- Maintenance Requirements:
  - Cleaning
  - Painting
  - Tooling
  - Coating/Sealing
- Life Expectancy
- Warranty

Selecting envelope systems that eliminate extensive maintenance cost including refinishing (painting) or frequent water-proofing (tooling, coating or sealing), minimizes future service costs which drives income to the bottom line.

When you couple these periodic savings with a system that provides a long life expectancy, you increase asset performance in both cost savings and revenue generation.

The final piece in the equation is choosing systems from reputable providers with sufficient assets backing their products and a demonstrated track record of performance backed by a product warranty that matches the performance expectations.

Never select a façade solution solely on the basis of aesthetics.

A proper balance should be achieved between construction cost, aesthetics and performance to maximize the asset ROI.

Hyatt Regency Renton WA

WHAT TO SPECIFY

1. Factory Finish for the highest quality and longest performance
2. Protective Coating over the color finish. Minimum 20 year color performance warranty.
3. Non-combustible for life safety and easy code compliance.
4. Long-term protection against defects to match the service life expectations. Minimum 50 year warranty.
5. Strong manufacturer support including required installer training specific to the project.
6. Integral anti graffiti treatment in the finish coating to minimize cost and facilitate performance.
7. Full system components from a single cladding manufacturer to insure compatibility of parts and ease of service over the service life.

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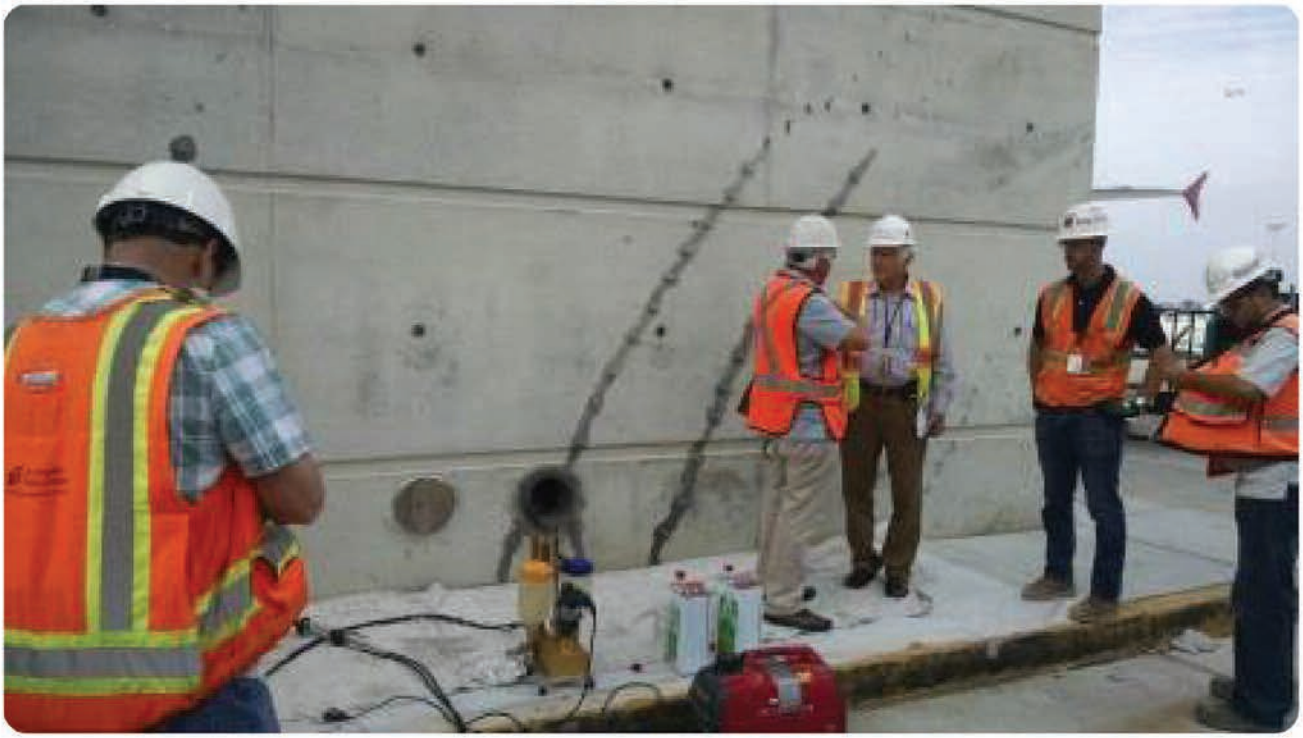
Unscheduled Coatings Departure Keeps LAX Cracks at Bay

*By **Christa Youngpeter** on 2/29/2016 6:20 PM*



Photos courtesy of Angelus Waterproofing

Los Angeles International airport is not only the 6th busiest airport in the world with over 165,000 people passing through daily — it's also an architectural icon thanks to the sweeping mid-century arched Theme Building that received a much-needed facelift completed in 2010. The airport as a whole is currently undergoing massive renovations and new construction from its runways to its parking lots.

Keeping in the spirit of an aesthetically centered city, the new Tom Bradley International Terminal was built with everything from high-end shops to trendy restaurants. Even its massive exterior walls were designed to please the eye. Unfortunately, like a hard partying starlet, the cracks began to show a bit too early.

The Los Angeles Airport Authority (LAWA) stepped in and hired Angelus Waterproofing and Restoration, Inc. to get to the root of the cracking issue. They would need to repair and waterproof 200,000 square feet (18,580.6 m^2) of 12-inch-thick (30.5 cm) concrete walls. The

catch? The finished project had to resemble the original architectural concrete.

Same Same, But Different

Stephan Claus and Shaun Geiger, respective president and CEO of Angelus, were selected for the difficult job. "LAWA hired a contractor to build the new Tom Bradley Terminals, and they didn't include any expansion joints thinking the slab was thick enough that they weren't needed. As a result, that caused micro-cracking, structural cracking, and just an overall unsightly appearance that allowed water to enter," Claus explained.

The cracking was so bad, in fact, that the smaller cracks resembled a shattered mirror. Geiger added, "Aesthetics were super important, so the spec was very unusual. The owner's rep said they didn't want to change the look of the gates and walls, so that was the challenging thing. How do you waterproof something and make it look like we were never there? So that took a while to figure it out." The agreed upon solution was KOSTER's urethane-injection at all cracks, followed by an application of Sinak Color Cap, which is a stain/coating that mimics the look of architectural concrete.

The process began by injecting the KOSTER IN5 urethane foam into cracks using a low-pressure Seal Boss P3003-2C. Then, they stripped the existing patching material, which at first the team was very hesitant to remove. Once the old patching material was removed, the crew injected a patching material from Simpson that they could use to fill the cracks and then peel away. Any materials remaining were sanded. A Sinak ColorCap coating in storm gray was then applied and cured.

According to Claus, "once the cracks were cured and prepped, we would lightly sand the matrix, then apply the Sinak ColorCap that had been diluted to the proper ratio. It was fogged on with a spray rig, a Titan SpeeFlo Hydra M 4000, then we would add another two to three coats, which, being a stained sealer, would be about one to two mils [25.4–50.8 microns] thickness once dry." The crew, sometimes using booms to access higher areas of the walls, would then move to the next gate area, always mindful of the active airport gates and working closely with the gate managers.

Keeping up With the Changes

Once it came time to present the first completed portion, the reaction was a bit unexpected. Geiger explained, "Once we completed the test wall for review we were met with, 'Nope, nope we don't like it!' despite the fact we did what was specified. Since the wall couldn't look like it was painted, we had to figure out a way to make the coating look like the architectural concrete, so we had to do a faux concrete look and applied different colors in different directions, modifying the spec to get the desired aesthetic."

The process was revised, and the remainder of the project continued for a total of 12 months utilizing a crew of eight workers. The day to day work, however, wasn't without its challenges. Claus noted, "We were working in active gates at the Tom Bradley International Terminal, within feet of jumbo jets that are worth tens of millions of dollars, along with tight security." The team had to undergo background checks, airport badging procedures, and driving tests, and they had daily escorts to the jobsite. "You couldn't just pull up and start working," Geiger said. "And it was a long process to get on site and off site. Guys parked at the construction trailers, then our Angelus pick-up truck, which had been bomb checked and given a special flag, would drive through the active runways to the gate, communicating via radio with the ground control tower."

Other than the security procedures, other concerns, such as safety and environmental restrictions, were standard and without any issue. All water from the water blasting was run to the sewer line; that plan was explained by LAWA and easily followed. The only weather concerns were rain and fog, as the walls had to dry before work could begin. "The marine layer was there all the time, but didn't really hinder our timeline. We would adjust the schedule if there was too much dew or it was too cold," Claus noted.

As far as the crew's safety, the team members followed regulations while utilizing booms or on the roof, wore safety harnesses, hardhats, gloves, and goggles, and had fire extinguishers handy at all times just in case.

High Expectations

Angelus Waterproofing and Restoration has been specializing in waterproofing and building restoration for more than 30 years and has experience working on projects at the Dallas/Ft. Worth Airport, including gate restoration and runway striping. Their project and waterproofing expertise ensured that this high-profile project would be a soaring success.

BUCH NOTES

(continued from page 5)

to his major contribution to St. Peter's, the redesign of the Basilica dome.

Michelangelo's design for the Basilica dome increased its height, compared to the dome designed by Bramante, and placed it on top of a much taller "drum" structure. Additionally, Michelangelo's dome, inspired by the shape of Brunelleschi's dome at the cathedral in Florence, (completed 100 years earlier), is more pointed giving it a more vertical appearance, more soaring and majestic. The dome at St. Peter's was the same diameter as the dome in Florence but the dome at St. Peter's is much higher. It begins 250 ft. above the Basilica floor where Brunelleschi's dome starts 180 ft. from the floor. When construction on the dome at St. Peter's was completed in 1585 it was 450 high compared to 380 ft. at the cathedral in Florence.

While St. Peter's was underway Michelangelo had other architectural works for Pope Paul III and had a major fresco commission underway. This fresco adorned the walls of the Pauline Chapel, a memorial to his friend, patron, and benefactor, Pope Paul III who died in 1549. The Pauline fresco was completed in 1550 by which time Michelangelo was 75 years old. He had outlived nearly all of his longtime friends and artist colleagues. He had no family except for a nephew living in Florence, Lionardo Buonarroti, with whom he was very close. Michelangelo had to rely on a close group of household servants and younger assistants to carry out many of the day to day tasks that he would rather have done himself. These included writing letters and making drawings since his hand was too unsteady by now. His visits to see work underway at St. Peter's continued but with less frequency.

By 1560 Michelangelo was 85 years old and he hadn't visited Florence in 25 years in spite of his nephew's requests and the urging of his former Medici patrons. He very much wanted to see Florence again before he died but couldn't bring himself to leave the work on St. Peter's, saying "he was put there by God" to see it completed. And while the Basilica wouldn't be completed until 20 years after he died, he did live to see construction completed up to the start of the dome. Michelangelo died peacefully after a brief illness, on February 18, 1564 at home in his bed. He had given 17 years of his life to St. Peter's in the process of serving as architect to five popes.

The author contends that St. Peter's Basilica is Michelangelo's most important work and not just because he spent more time and energy on it than any of his more well known sculptures or frescos. It demonstrated his courage when he took on the fabbrica and removed 40 years of work completed on St. Peter's contrary to Bramante's original design. Just as important, his vision for the design resulted in a dome that dominates the skyline of Rome to this day and creates an interior space filled with light inspiring space for worship. The Basilica was lengthened to form a Latin cross in 1612 and Bernini completed the piazza in front of the Basilica in 1657 but it is still Michelangelo's St. Peter's.

Michelangelo, God's Architect was published in 2019 by Princeton University Press. It has 277 pages and includes many pages of color photographs and drawings. It's basically a biography so it doesn't include any technical descriptions of the construction of the dome like those included by Ross King in his book on Brunelleschi's dome at the cathedral in Florence. For this see BuchNotes #13, May/Jun 2006.

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Meeting Schedule and Information

Upcoming Meetings:

Next Meeting is in February 2021