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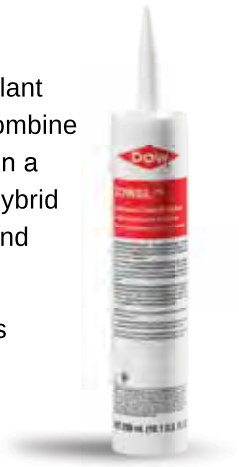

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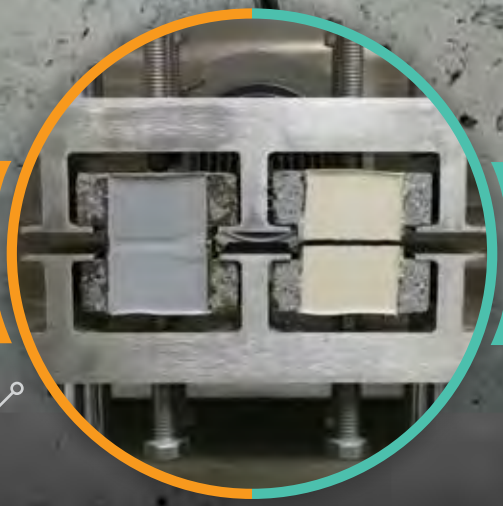

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PIER POINT SOUTH CONDOMINIUM OCEAN FRONT DECK COATING PROJECT

BY JEREMY BLANCHARD, CHIEF EXECUTIVE OFFICER, BLANCHARD CAULKING AND COATING

Pier Point South Condominium, St. Augustine, Florida

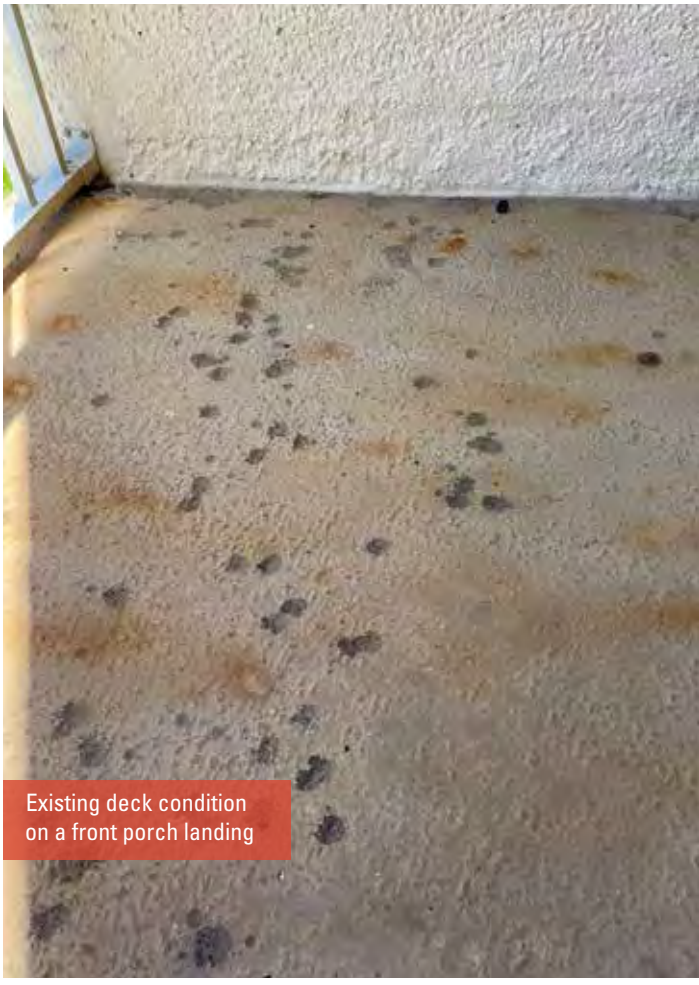
Existing deck condition

The Pier Point South Condominium in St. Augustine, Florida needed a waterproofing contractor that could recoat its breezeway floors and balconies during the rental season, without shutting down access to the units. With advances in material technology, Blanchard Caulking and Coating was able to use Sika's one coat fast cure deck coating system to make it happen. The one coat deck coating system enabled renters and owners to be out of their units for only a total of half a day. The condominium is on the ocean front, and walking distance to plenty of amusements, so no one complained.

Polycarbonate diamond grinding pad with vacuum attachment

Existing deck conditions

Existing deck condition in a stairwell



Existing deck condition on a front porch landing

SCOPE OF WORK

The scope of work included mechanically removing existing deck coating on breezeways, front porch landings and stairwells. These areas were then one coated with Sika One Shot fast cure deck coating system. The owners were on a budget, so to save labor costs, if a balcony looked and felt well bonded, Blanchard pressure cleaned the balcony then applied an epoxy primer over the existing urethane deck before applying the Sika One Shot system.

Before the project started, multiple mockup pull tests were performed with the new coating system on each type of existing substrate to ensure bonding with or without the use of primer. The material bonded tenaciously to the existing deck coating with or without primer. It was decided to prime all existing coatings and to prime all ground floor landings to prevent possible vapor drive.

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Seven inch diamond cup grinder and 4 inch grinder with Zeck pads to remove deck coating at staircases

> "The owners were thrilled that their rental income was able to keep flowing while their existing breezeway floors and balconies got a facelift."

Deck condition after grinding

REMOVAL OF TWO LAYERS OF DECK COATING SYSTEMS

An electric walk-behind 30 inch wide grinding machine was used to remove the two layers of existing deck coating systems. The magic of this machine is in the grinding pads which are made of Poly Carbonate Diamonds (PCD's). These diamond cups made short work of the existing deck coatings and provided a concrete profile of CSP 4-5 for the application of the new deck coating system. Vacuum attachments were added to all grinding machines to ensure a dustless work area.

Unfortunately, the stairwell deck coating could not be removed with the large grinding machines. Instead, four inch and seven inch hand grinders were used with diamond cups and Zech wheel pads. This was definitely the sweatiest and most time-consuming part of the job.

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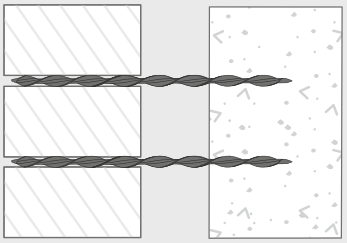
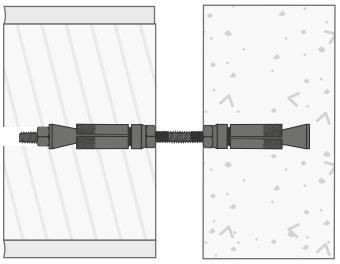


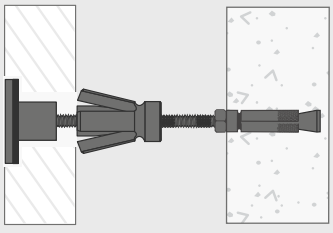
GRIP-TIE

HIGH STRENGTH MECHANICAL ANCHORS to fortify a masonry or stone facade to metal or wood stud, structural steel, tile, block, concrete, and brick.



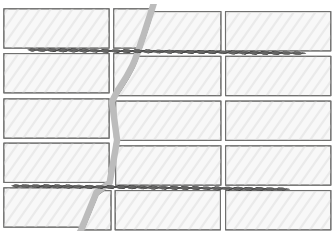
STONE GRIP-TIE

HIGH STRENGTH MECHANICAL ANCHORS for re-anchoring unstable, thin dimensional stone and precast panel facades.

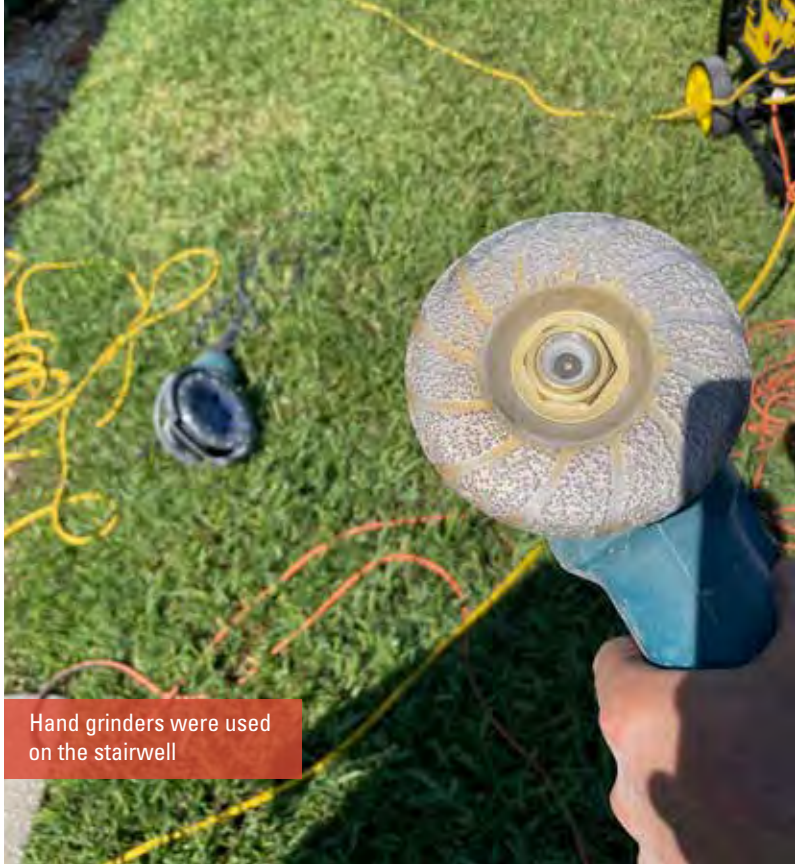


STITCH-TIE BAR

HELICAL BAR AND GROUT KIT that repairs cracked masonry & provides reinforcement to existing brick veneers.



Removing the deck coating on the stairwell was dirty work



Hand grinders were used on the stairwell

Patio deck coating's deteriorated condition

Prepped front porch landing

Cracks detailed with polyurethane sealant

Prepped stairwell

PREPARING THE SUBSTRATE

Once the existing deck coatings were removed, many hairline-to-¼ inch cracks needed to be detailed with polyurethane sealant. At the stairwell risers, deep honeycombs were revealed after the coatings were removed. Polyurethane sealant was troweled into these deep divets in order to provide a flat surface for the One Shot material to perform its job well.

Originally, priming the bare concrete stairwells before the One Shot deck coating application was to be applied, was not part of the scope of work. That changed once we learned that the One Shot product flowed better and produced a better finish in these rougher concrete areas when the concrete was primed first. It was decided early on that spending the extra money to apply epoxy primer in these areas was necessary. Whatever additional costs were incurred by adding the epoxy primer were more than justified by the ease of application and the more consistent-looking finished product.

LESSONS LEARNED

The stairwells provided other lessons about using the One Shot product. The pot life of this material has a 20-minute cure time at 75 degrees. This job was completed in the humid Florida summer with an average of 85-to-95 degree temperatures during the day. We estimated that for every 10 degrees of increased temperature, the material pot life would be cut in half. That meant we had about eight to ten minutes to move the coating from the mixed pail in the lay down area to the floor. Time was seriously of the essence.

In the beginning of the job, our mixing station was too far from the actual work area. We streamlined this process and created a mobile mixing area with battery-powered drills and rigid drops to follow the work onto breezeways and balcony areas. This change saved applicators a couple extra minutes and helped reduce wasted material. We also learned that storing material in an air conditioned location increased the pot life significantly.

Balcony floor restored beautifully

Completed breezeway restoration

Finished floor restoration

"Another trick we learned to speed up the application process was to cut in the floor perimeter and stairwells with One Shot without adding the aggregate to the pail."

Side view of the Pier Point Condo complex

Close up of floor texture

Another trick we learned to speed up the application process was to cut in the floor perimeter and stairwells with One Shot without adding the aggregate to the pail. Once the deck was entirely cut in, the One Shot system with aggregate was mixed and applied quickly before the material had a chance to fire off in the bucket. The finished product was incredible, as you can see in the pictures.

Another thing to keep in mind when using any fast cure deck coating product is the amount of sundry items (roller naps, cut in brushes, frames, rags, solvents, etc.) needed to effectively apply the product. At the end of the project, we concluded that our cost of sundry items ran over budget by 60 percent! Thankfully this line item in the budget represented a small portion of the total costs, but this is a lesson we won't forget next time!

CONCLUSION

With a conventional urethane deck coating system, we would need three days to work on each balcony which would be very disruptive to the condominium association. With Sika's One Shot pedestrian deck coating system, Pier Point Condo owners and renters only needed to be out of their units for a total of four-to-six hours. The owners were thrilled that their rental income was able to keep flowing while their existing breezeway floors and balconies got a facelift.

About the Author

Jeremy lives in Jacksonville, Florida. He is married with three young children. Jeremy has been raised in the family waterproofing business and has recently taken over Blanchard Caulking and Coating from his father, Dennis Blanchard.

Besides running the family business, Jeremy enjoys practicing his Catholic faith, spending quality time with his family, and playing pickup basketball early in the morning before work.

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SEALANTS: LIMITLESS OPTIONS WITH LIMITATIONS

BY CHARLES SIETMANN, RRO, REWO, CCCA, CIT AND JOSH WOLF, EIT

There are countless types of sealants, each with unique chemical and physical attributes, and even more unique uses. Sealant selection should be made carefully to ensure that the proper sealant is used for the intended application. This article summarizes common terminology, specifications, and requirements when using sealants in the construction industry.

CAULK VS. SEALANT

Historically, the terms caulk and sealant have been used interchangeably. In modern construction, caulk is commonly used as a slang term referring to sealant materials. However, caulk is an archaic term that generally refers to oil-based compounds and materials with low movement capability. When used correctly, caulk can be used to define latex or acrylic compounds used to prevent the passage of air and water, typically of low quality and limited service life, and often used at interior applications.

Alternatively, sealants, specifically joint sealants, are construction materials with movement capabilities greater than 12-½ percent used to prevent the passage of water and air. Sealants are materials with various applications such as differential movement accommodation, structural integrity, and fire and smoke barriers. Given these various applications, sealants require substantial design considerations including joint size, joint location, and substrate material. Thankfully there are several industry standards that define sealant materials and outline the design procedure.

SEALANT CLASSIFICATION

ASTM International (formerly American Society for Testing and Materials) has several reference standards regarding sealants. The first important standard for

sealants is ASTM C920 – "Standard Specification for Elastomeric Joint Sealants." This specification covers properties of joint sealants used for sealing or glazing operations on buildings, plazas, decks, and other various types of construction. Sealants qualifying under this specification are categorized based on type, grade, and class.

Type S sealants are single-component materials while Type M sealants are multi-component. Grade P sealants are pourable, or self-leveling, materials which are primarily used for horizontal applications and will result in a level surface after curing. Grade NS sealants are non-sagging and gunnable materials primarily used in vertical applications as their properties prevent slump.

ASTM C920 further defines several classes of sealants. Each class of sealant indicates the allowable percent change in joint width. For example, a Class 100/50 sealant can accommodate a 100 percent increase and a 50 percent decrease in joint width when tested for adhesion and cohesion under cyclic movement, while a Class 50 sealant can only accommodate a 50 percent increase or decrease in joint width. Other classes include Class 35, 25, and 12-½.

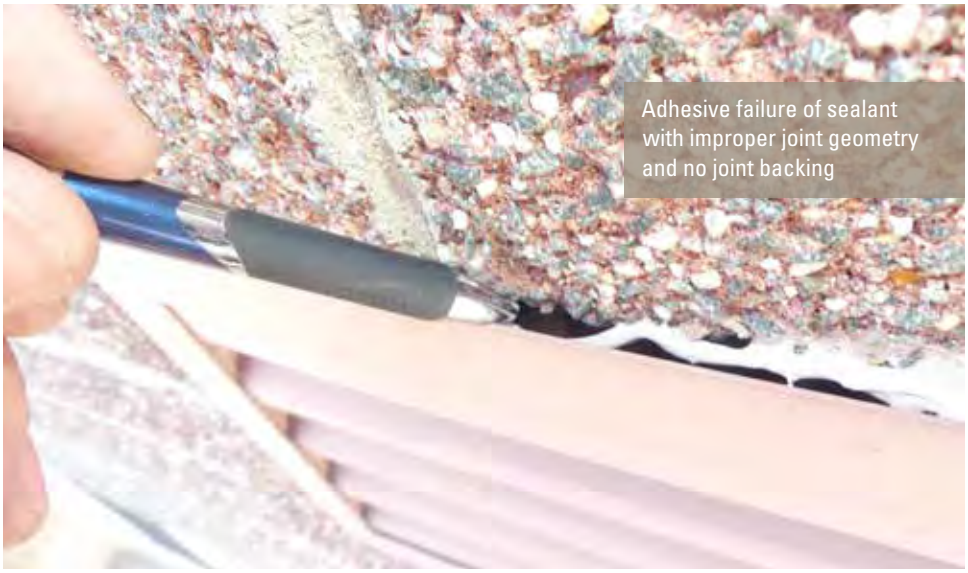
Lastly, ASTM C920 assigns designations to sealants for their particular use. T1 and T2 uses are sealants designed for traffic areas with higher and lower durometer (hardness) requirements, respectively. The specification notes that hardness alone does not correlate with joint performance. The joints in pedestrian and vehicular traffic areas such as walkways, plazas, decks, and parking garages require appropriate design considerations including material selection, total joint design, manufacturer involvement and field testing. NT use sealants are designed for nontraffic areas. Designations I, M, G, A, and O relate to specific substrate requirements such as Liquid, Mortar materials, Glass, Aluminum, and Other substrates. These uses are determined by testing the sealant materials in accordance with several test methodologies outlined later in ASTM C920. When selecting a sealant, it is important to know where a sealant is intended to be used. Properly prepared specifications should outline the required type, grade, and class.

SEALANT SELECTION

Sealant selection and application is more than just a line in the specifications. The proper application of sealants involves not only choosing a sealant with the correct physical and chemical properties, but also requires proper joint design, knowledge of the substrates to be sealed, and the performance needed. It is important to understand that sealant materials must be compatible with substrate materials and have been approved for their intended use. Improper selection of sealant can result in staining of the substrate which occurs when plasticizers or fluids in the sealant leach into the substrate. This can be common with certain types of silicone sealants and porous stone substrates. Some sealants also do not perform well with prolonged ultraviolet (UV) exposure, or exposure to water or chemicals.

ASTM C1193 – "Standard Guide for Use of Joint Sealants" describes the use of a cold liquid-applied sealant for joint sealing applications. This guide discusses the general considerations for proper selection and use of a sealant, including durability, adhesion, compatibility, staining, color change, liquid immersion, environmental influences, and sustainability.

There are many different sealant chemistries that have varying characteristics for each of the design considerations. The most common chemistries include polyurethane (PU), silicone, silyl-terminated polyether (STPE), latex, acrylic, and polysulfide. Other less commonly used sealants include polycarbonate, butyl, and modified asphalt



Adhesive failure of sealant with improper joint geometry and no joint backing

Cohesive failure of sealant at masonry expansion joint

mastics. Each chemistry has its own advantages and disadvantages, and may be more suitable for specific applications.

Various sealant types are available in one-component or two-component formulations. One component sealants are comprised of one base component and do not need to be mixed prior to application. One-component sealants are often easier to install due to the lack of required mixing. However, one-component products may require longer cure times and may need exposure to moisture in the air to cure. Two-component products are comprised of a base component and activator component that require mixing equipment for preparation and application. These sealants may cure quicker and more uniformly than one-components, without exposure to atmosphere.

PU sealants are versatile and one of the most common sealants used in the construction industry. These types of sealants generally have good adhesion and compatibility with most substrates, have good elasticity, durability, and paintability. However, PU sealants are comprised of polymers with organic compounds and typically do not have as long of a lifespan due to degradation from long-term exposure to UV. They are relatively inexpensive compared to other types of sealants.

Silicone sealants are also very versatile and widely used throughout many industries. The inorganic composition of the sealant makes it less reactive to UV exposure, increasing its long-term durability. Silicones are traditionally more flexible, but lack the paintability of other types of sealants, and are generally more expensive.

STPE is a hybrid product of silicone and PU technologies. They may also be referred to as modified polyurethane, MS (Modified Silicone) Polymer, SMP (Silyl Modified Polymer and Silane Modified Polymer), or STPU (silyl-terminated polyurethane). These types of hybrid sealants combine the strength and toughness of polyurethanes with the weathering resistance of silicones. They also offer a broad range of compatibility with various substrates, and are more paintable than silicone sealants.

Latex sealants are primarily used for interior applications. Latex is water-based making it easy to tool and easy to cleanup, and are also paintable. They are generally less flexible, and are relatively less expensive than other types of sealants.

Acrylic sealants are often used in construction applications with low movement joints due to their limited movement capabilities. They are UV stable and paintable, but can be more difficult to install. The cost of acrylic sealants is in the low to moderate range.

Polysulfide sealants are a more rigid sealant, but have good water, chemical, and UV resistance. Due to their rigidity, they do not perform well in conditions with significant movement, but are used in joints in pavement, automotive window glass, and aircraft structures. Polysulfides are also commonly used in submerged applications such as swimming pools. This type of sealant tends to be relatively expensive comparatively speaking.

Polycarbonate sealants are often clear and primarily used in some curtain wall and horizontal joint applications. They have poor UV resistance and are subject to becoming brittle when exposed to UV.

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PHYSICAL PROPERTIES

PROPERTY	VALUE	ASTM TEST METHOD
DENSITY	1.8-2.5 lb/ft3	D 1622
OUT-GASSING	None	C 1253
COMPRESSION RECOVERY	95% min	D 5249
TENSILE STRENGTH PSI	39-50 PSI	D 1623
TEMPERATURE RANGE	-90°F to 210°F	D 5249
WATER ABSORPTION	< .03 g/cc	C1016 - Proc.B

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DESIGN CONSIDERATIONS

There are several considerations involved when designing a sealant joint. One of the most important is movement design. As previously stated, sealant joints are primarily designed to accommodate for differential movement of structures. Without proper design considerations, sealant joints may not perform adequately and lead to premature deterioration.

ASTM C1472 – "Standard Guide for Calculating Movement and Other Effects When Establishing Sealant Joint Width" provides information on performance factors such as movement, construction tolerances, and other effects that should be accounted for to properly establish sealant joint size. The guide also provides procedures to assist in determining the required width of a sealant joint, enabling it to respond properly to those movements and effects. Included in the guide are performance factors and tolerances that are normally considered in sealant joint design. Equations and sample calculations are provided to assist in determining the required width and depth for single and multi-component, liquid-applied sealants when installed in properly prepared joint openings.

There are four basic movements that sealant joints experience, which include compression, extension, longitudinal extension, and transverse extension. The design of joints often times must accommodate more than one of these types of movement.

Two critical aspects that need to be accounted for during the design process are thermal movements and moisture induced growth. Thermal movement is the expansion or contraction of a material due to temperature. As the materials on either side of a sealant joint increase in temperature they will expand, resulting in compression of the joint material. The opposite is true when materials on either side of a sealant joint decrease in temperature. Moisture induced growth occurs when a porous material absorbs water, resulting in swelling. Material swelling leads to similar results as thermal expansion.

Once the factors that affect sealant joint performance have been identified for a particular application, several equations can be used to quantify the effects. Surface temperatures and the degree of various movements are determined and then used to calculate the required width of a sealant joint to satisfy the movements. Lastly, the effects of construction tolerances and the depth of the sealant joint are established and included in the joint design. Joint depth guidelines typically call for ¼ inch minimum depth for joints with widths between ¼ inch and up to ½ inch. For joint widths greater than ½ inch and up to ¾ inch, a depth half of the width is recommended. For joints with widths greater than ¾ inch and up to 2 inches wide, it is recommended that a depth of 3/8 inch be provided. If joints greater than 2 inches in width are required, it is recommended that the sealant manufacturer be consulted as there may be other alternatives to consider such as pre-formed joint materials.

It should be noted that standard of care does not require the design of every

Preparation of a sealant joint, including the removal of old sealant

Adhesive failure of sealant at corner of aluminum window

Failed sealant adhesion test. Note the missing joint backing in the vertical joint and improperly sized joint backing in the skyward facing joint

sealant joint on a given structure. It is common practice, and frankly more practical and realistic, to design for the primary seals and most critical types of joints, accounting for the worst-case scenario for each type of sealant joint.

INSTALLATION

The most common mode of sealant failure is adhesive failure, often as a result of poor workmanship, including improper surface preparation. ASTM C1193 provides requirements for sealant installation. Surfaces must be clean, dry, and free of dew or frost prior to the installation of sealant. Best practices include cleaning porous substrates thoroughly using, high pressure water, grinding, wire brushing, and/or oil-free compressed air. On non-porous substrates, a clean substrate can be achieved with a two-rag method which involves the use of a clean, lint-free, and absorbent solvent wipe, followed by an immediate dry cloth wipe.

Following proper cleaning of the substrates, priming is often recommended. Priming of joints maximizes adhesion and can ensure adhesion to special substrates. Primers can and should be used in most applications unless the sealant manufacturer indicates that primer will have an adverse effect on adhesion. Priming should be accomplished with the sealant manufacturer's supplied or recommended primer and be applied at the recommended rates. It is important to not apply too much primer and to not prime the sealant backing material. Improper priming or promoting adhesion to the backing will have an adverse effect on performance. Primers should be allowed to dry prior to installation of the joint backing.

Joint backing is required in most joint types to avoid having three-sided adhesion. Sealants without a joint backing will not be able to extend or compress as intended. Backer rods and bond breaker material set at the appropriate depths also help maintain joint profile. Backer rods should be appropriately sized for the joint, typically being under 25 percent compression. Often times, multiple diameters of backer rods will be necessary on a project and should be made available during construction.

Failed sealant

In highly visable areas, or where aesthetics are important, taping along the outside edge of joints is recommended

In highly visible areas or where aesthetics are important, taping along the outside edge of joints is recommended. After installation of the joint backing, sealant is gunned into the joint using constant pressure and flow, avoiding gaps and inconsistent thickness. The sealant joint should then be tooled creating an hour glass type shape. Tooling is a vital step and is not only for aesthetics, but it compresses the sealant against substrate bonding surfaces. If tape is used along the joints, it should be removed immediately following the tooling while the sealant is still wet.

The sealant installer should be aware of joint width at the time of installation as it relates to temperature, and they should also be aware of curing temperature or other atmospheric conditions that can impact installation or curing.

QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

The Sealant, Waterproofing, and Restoration Institute (SWR Institute) developed the Liquid Sealant Validation Program to validate published test results of various sealant products. The intent of the program is to provide specifiers and end-users of sealant products an unbiased method to judge whether sealant products will perform at the levels of the manufacturer's published datasheet

for a particular product. The program is voluntary, with laboratory tests conducted by approved independent laboratories. Validation of the SWR Institute performance properties profile for sealants includes ASTM C719 testing. Validation remains in effect for five years from the date of the validation testing and in the event the sealant product is reformulated by the manufacturer, the product must be re-tested and re-validated. A current list of validated liquid sealants can be found on SWR Institute's website: https://content.swrionline.org/ValidatedSealants

Not only should each installing contractor use validated products, but they should also implement their own QA/QC procedures during sealant installation or replacement. In addition to observing the installation procedures discussed above, it is a good practice to perform project site adhesion tests as part of a mock-up prior to sealant installation. The tests should be performed even when unusual conditions are not suspected. Additionally, it is advisable to perform periodic adhesion testing during sealant installation to verify the quality of the work.

ASTM C1521 – "Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints" outlines procedures for performing in-situ testing of applied sealants. The sealant manufacturer recommended cleaning and, if required, priming instructions for the application, should be followed for an in-situ mock-up test. Typically, the sealant is installed in the joint, and following the recommended curing period, the joint is then destructively examined to determine if proper adhesion has been achieved. Test cuts are taken at completed joints at random locations or in suspect areas to view joint configuration and check adhesion.

The testing procedure most commonly used for adhesion testing is referred to as the tail procedure. The procedure consists of cutting through installed sealant joint 6 inches along the bond line at both substrates. The cut portion of the sealant is then marked 1 inch from the adhesive bond. Then by grasping the sealant tail at the mark 1 inch from the adhesive bond, the tail is pulled at a 90 degree angle to the substrate to effectively extend the 1-inch mark to two times the stated movement capability of the sealant. The type of failure that then occurs and the distance of the mark from the adhesive bond when failure occurred are recorded. A failure is reported if the sealant pulls away from the substrate or breaks away

from itself before reaching the distance recommended by manufacturer. If a failure does occur, the mechanism for the failure should be further evaluated.


Correct sealant adhesion test - tail procedure. Sealant properly elongating

In other locations not destructively tested, it is common to perform non-destructive testing by simply using a blunt instrument to probe random joints as well as suspect areas. The probing is done in one of two techniques. The first technique is performed by depressing the center of the sealant to create an elongation strain on the sealant joint while recording the depth of the depression and any observed failures. The second technique is performed by locating the probing tool adjacent to the sealant-to-substrate bond line, and depressing the sealant to the extent that it appears the sealant is about to fail cohesively. Well-adhered sealant will show no evidence of adhesive or cohesive failure when subjected to probing.

CONCLUSION

Achieving a successful sealant installation can be accomplished by properly considering the numerous factors related to sealant design and installation. Not only is designing the joint and installing the sealant properly the key to success, selecting the right products and knowing their limitations will undoubtedly result in the joints performing as intended.

REFERENCES

- ASTM Standard C920-18, *"Standard Specification for Elastomeric Joint Sealants,"* ASTM International, West Conshohocken, PA
- ASTM Standard C1193-16, *"Standard Guide for Use of Joint Sealants,"* ASTM International, West Conshohocken, PA
- ASTM Standard C1472-16, *"Standard Guide for Calculating Movement and Other Effects When Establishing Sealant Joint Width,"* ASTM International, West Conshohocken, PA
- ASTM Standard C1521-19, *"Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints,"* ASTM International, West Conshohocken, PA

About the Authors

Charles Sietmann is Principal – Building Enclosures with Building Technology Consultants (BTC) in Arlington Heights, Illinois. Mr. Sietmann has over 17 years experience in the evaluation, analysis, repair, and rehabilitation of existing building facades, windows, roofing and waterproofing systems. He is a Registered Exterior Wall Observer (REWO), Registered Roof Observer (RRO), Certified Construction Contract Administrator (CCCA). He is also a Certified Level I Infrared Thermographer (CIT) with Roof Specifics, conforming to the guidelines of American Society of Nondestructive Testing and an FAA Certified Remote Pilot with a small Unmanned Aircraft Systems (sUAS) Rating. Among his professional activities, Mr. Sietmann is currently serving as Director of Region III for International Institute of Building Enclosure Consulting (IIBEC).

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ALOHA FROM HONOLULU!

SWR Institute's 2023 Winter Technical Meeting Journeys to Hawaii

2023 Winter Technical Meeting

The 2023 Winter Technical meeting in Honolulu, Hawaii gave members the chance to hear seven top-notch presentations, learn about new products, network and play in a truly magical location. Members and speakers came from across the country to take part in this semi-annual meeting of the best minds in the industry. Spouse attendees were at an all-time high and 31 first timers joined the meeting. The 164 members who attended Winter Tech bettered by 33 the number of attendees who traveled to Hawaii for the 2013 meeting. When asked about their most valuable take away from the meeting, one member said "…being able to interact with other contractors and manufacturers at a higher level. This, in turn, allows me to be more effective for my company. I am able to gain information and insight that I normally would not be able to obtain." Another member observed "that there is always something you don't know, no matter how long you've been doing this." Members were treated well at the Alohilani Resort and enjoyed views of Waikiki beach. The open-air lobby was a lush place to meet up or just enjoy the excellent people watching.

Breakfast with exhibitors included a side order of infomation

Each meeting day started off with a breakfast buffet in the exhibit hall where manufacturer sponsors were available to answer questions and talk about their newest products. The general sessions began soon after with some members carrying coffee or a plate of tropical fruit and bacon to their table. Project presentations were interspersed with new product presentations, The Biggest Challenge mini-presentations, coffee breaks, the Project Awards Ceremony, a town hall meeting and Board elections.

Afternoons were left open for the SWR Institute golf tournament and other Hawaiian adventures. Members snorkeled off Waikiki beach, toured the Pearl Harbor Memorial, explored the North Shore by car, watched the sunrise at KoKo Head Crater and Diamond Head, jumped off a cliff into the sea at Laie Point, golfed at the Jurassic Park Golf Course, hiked the Pali Notches, went freediving in some caves on the North Shore, attended luaus, went deep sea fishing, hiked to Manoa Falls, climbed the Makapuu Lookout, toured the Dole Pineapple Plantation, and enjoyed Malasadas, Hawaii's ultimate donut.

Meeting days ended with either a structured happening, the Opening Reception and the Pass the Gavel Party, or a chance to explore Waikiki with family, friends, colleagues and clients. Noteworthy restaurants and the famous

Brad Fish, Nystrom; Doug DeSilvio, GDA Contractors; Brad Sandroni, Raymond E. Kelley Inc. and Justin Rice, Nystrom, enjoy a view while golfing

Alley Mathson, PROSOCO; Mark Mathson, Curtain Wall Design and Consulting; Michael Bernhard and John Raffio, Metro Caulting & Waterproofing are ready to golf

Frank Duarte, Keystone Waterproofing & Restoration, LLC, and (left to right) Brian Blanchard, Stone Restoration of America, Inc.; Jeff Bradley, Keystone Waterproofing & Restoration, LLC; Christopher Perego, Master Builders Solutions; Matt Osborne, Master Builders Solutions at the top of Diamond Head

Project presentations took place in the Alohilani II ballroom

Waikiki beach were only a short walk from the Alohilani Resort. If that short walk was too far, the resort had a pool-deck restaurant and another right on Waikiki's main drag. If snacks (or souvenirs) were called for instead of dinner, the famed ABC store had an outpost in the hotel lobby.

The 2023 Winter Technical Meeting started on Sunday with Committee Meetings. Membership, Program Planning and Validation Committee meetings ran concurrently and were followed up by the Technical Resources Committee and Safety Committee meetings. Each meeting lasted an hour and a half to give the committees time to review current projects and map out what needs to happen before the next meeting. All members attending committee meetings, whether this is their first meeting or their ninth, are encouraged to contribute to the discussion. Many of the committee meetings were standing-room only.

Sunday evening's events started with the First Timers' Reception where first-time attendees and their Ambassadors were welcomed to the meeting by Jennifer Crane, Executive Vice President of SWR Institute and Crane Martin CEO. The Ambassador program is designed to connect people and start conversations. One first timer said "I just think the program is very useful to help people get plugged in to the network." Another noted "This program got new folks involved on day one. Great job!" People then moved from the indoor reception to the Pecora-sponsored Opening Reception on the deck of the Alohilani outdoor pool. Each guest received a fresh lei and a was entertained by Hawaiian dancers and a local guitar trio, sponsored by PROSOCO. Dessert, coffee, salad and main course tables were located around the pool. As the sun set over Waikiki beach, members toasted fellowship and friendship with MaiTais.

Pass the Gavel Party at Morimoto Asia Restaurant on Waikiki beach

Monday morning, after a breakfast sponsored by Neogard, President Michael MacDonagh opened the general session with a big "Aloha!" and a recap of his time as president. This was followed by life-long Hawaii resident Sean Dunham's, Kawika's Painting, Inc., introduction to Hawaii and Honolulu. Emcees John Lambert, Stone Restoration of America, and Eric Verlander, EMSEAL Joint Systems, then took the microphone and called the first presenters to the stage.

The Trinity-Award-winning trio of Brett Laureys, Wiss, Janney, Elstner Associates; John Krouse, Boston Valley Terra Cotta LLC; and Dave Pettigrew, Mark 1 Restoration Company, in matching shirts, made their way to the podium. Their presentation, Restoration Design/Build: Fulton County Courthouse, demonstrated how a design/build can be optimal when all parties communicate well. Built in 1914, the Fulton County Courthouse in downtown Atlanta is a terra cotta and granite-clad building. After pieces of terra cotta fell from the upper portion of the building, the county put the project out for bid. Though the solicitation included an extensive recladding of portions of the building using panelized GFRC, the trio was able to modify the county's approach to the project and save the county money by recommending an alternative solution using terra cotta. The presentation included an overview of the terra cotta re-creation

Women in Waterproofing
Back row: Cindy Raffio, Metro Caulking & Waterproofing; Alley Mathson, Prosoco; Natalie Faber, Balco Inc.; Jaime Ketterhagen, Stone Restoration of America
Front row: Carin Mack, A-1 Orange ; Dunja Vla, WJE; Jessica Maguire, Allied Waterproofing, Inc.; Diane Kaese, Kaese Architecture, LLC; Karen Zimnicki, WJE

in 1988, endured thermal staining, cracked joints and panels, active water leaks and a façade that was slowly self-destructing. Much of this was due to thermal stresses on the ¾" pink GFRC panels that stemmed from the original method of attachment. Century Building Solutions used epoxy stitching to address the cracking and applied a white state-of-the-art Italian cork aggregate thermal coating which reduced the surface temperatures over 30 degrees. One member said "The project timeline was over many years and it really aligns with the type of work we do as a company. Great presentation!" To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Before the New Product Presentation by EMSEAL Joint Systems, attendees enjoyed a coffee break sponsored by Conproco.

During the next presentation, 10 & 30 S. Wacker River Wall Remediation, Jessica Maguire and Bill Leonard, Allied Waterproofing, Inc., and Dunja Vla, Wiss, Janney, Elstner Associates, Inc., shared the challenges of addressing retaining wall deterioration along the Chicago River at the base of 10-30 S. Wacker Drive in Chicago, Illinois. This was Allied Waterproofing's first time working with underwater concrete installation. Access to the job site was a challenge not only because the work was staged off a rented barge but also because it was 30 feet below street level. The work included repair of delaminated concrete both above and below the river waterline. Great care was taken so that no debris got into the river. After the walls were repaired, a breathable water repellent sealer was and the coordination required between the three SWR Institute members. When asked about this presentation, one attendee said "Brett is a dynamic presenter, the complexity of these projects is fascinating and leads to a lot of discussion." To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Jumping over to the west coast, the next presentation was on a high-rise project in Woodland Hills, California. During the presentation Trillium Towers - Thermal Coatings to the Rescue, Kelly McBride, Century Building Solutions, took members on an almost-20-year journey that started with leaking windows and ultimately ended with the owners of the twin 18-story buildings being convinced to go forward with structural repairs and coatings that revived the buildings. Along the way, the towers, built

Jessica Maguire, Allied Waterproofing, Inc., Dunja Vla, WJE, and Bill Leonard, Allied Waterproofing, Inc., presenting their Wacker River Wall project

applied over the concrete wall cap surfaces, cracks were routed and sealed and boat tie-offs were replaced. One member added "The Wacker River Wall project was out of the ordinary. Project, access, staging, etc. all a bit different than the 'typical' restoration story." It certainly was! To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Tuesday's breakfast was sponsored by APT Advanced Polymer Technology, Corp., and included both bacon and sausage. Fruit and yogurt were also available, but a quick survey of members showed that the breakfast meats were far more popular than the yogurt.

After opening remarks, the Town Hall Meeting was called to order by John Gilchrist, SWR Institute's Legal Counsel, and Board Elections were held. The 2023 Executive Committee is: President Stace Grund, Tatley-Grund, Inc.; President-elect Jessica Maguire, Allied Waterproofing Inc.; Secretary/Treasurer Thomas Gormley, Pullman SST, Inc.; Immediate Past President Michael MacDonagh. The newest members of the Board of Directors are: Alley Mathson, PROSOCO, Inc.; Frank Halsey, Mid-Continental Restoration Company, Inc. and Frank Duarte, Keystone Waterproofing & Restoration. Board members are elected for a three-year term. Past President Michael MacDonagh thanked Melissa Cassel, Pecora Corporation, Tom Gormley, Pullman SST, Inc. and Stan Wellinsky, Valcourt Building Services, for their time as a directors. Newly elected SWR Institute President Stace Grund, Tatley-Grund, Inc., shared plans to focus on membership during his coming year as president.

Past President Michael MacDonagh, EDS, passes the gavel to new SWR Institute President Stace Grund, Tatley-Grund, Inc.

Staying on the stage, Stace Grund, Tatley-Grund, Inc., launched the new project presentation category called "The Biggest Challenge." This 15-minute presentation gives members a chance to share a project without having

Kelly McBride, Century Building Solutions, Inc., (left) with 2022 Award of Excellence Recepient Tom Gormley, Pullman SST, Inc.

Kelly McBride, Century Building Solutions, Inc., (right) with 2022 Trinity Award Recepients for the Restoration Category (left to right) David Pettigrew, Mark 1 Restoration Company; John Krause, Boston Valley Terra Cotta and Brett Laureys, WJE

Kelly McBride, Century Building Solutions, Inc. (right) with 2022 Trinity Award Recepients for the Sealant Category (left to right) Karen Zimnicki, WJE; Frank Zhong, Dow Silicones; and Aaron Willams, Western Specialty Contractors

to prepare a 45-minute mega-multi-media extravaganza. Grund presented The Flying Hot Tub about the perils of installing a hot tub to the top floor of a high-rise condo when the not-commercial grade hot tub was purchased by the condo association without regard to commercial building codes. They made it work but the photos of the flying hot tub made everyone sweat a little bit.

The next The Biggest Challenge presentation was by Robert McDowell, Wxproofing, LLC, and called How to Shut Down a Hospital. Due to product incompatibilities, a three month-long project ended up taking a year to complete. Good communication saved the day. About The Biggest Challenge presentations, a member said "As a contractor, I am able to relate this to some of the odd ball difficulties we run into on occasion and have to figure our solutions. It's great to hear other contractors' unique challenges."

A New Product Presentation was given by Brad Stare, AVM Industries, Inc., and detailed AVM's Aussie Tite 540 product.

Awards Chair and Past President Kelly McBride, Century Building Solutions, Inc., leaped to the stage to start the Project Awards Ceremony and shared the personal and professional value he believes that winning a Trinity Award or an Award of Excellence brings to the winning companies. Before announcing the winners, he noted that submissions were up 40 percent and encouraged members to keep sending in applications.

The 2022 Award of Excellence was earned by Pullman SST, Inc. for their Franklin Field Restoration project. Tom Gormley accepted on behalf of Pullman, SST, Inc.

The 2022 Trinity Award - Restoration Category was won by the Fulton County Courthouse Restoration Project. Brett Laureys, Wiss, Janney, Elstner Associates (WJE), John Krause, Boston Valley Terra Cotta (BVTC), and David Pettigrew, Mark 1 Restoration Company, accepted the award. Their team approach to completing the project was echoed in their acceptance comments. Laureys thanked BVTC and Mark 1; Krouse thanked WJE and Mark 1; Petigrew thanked both WJE and BVTC adding "Thank you to our guys in the field. They are the center of everything we do and any successes we have."

The 2022 Trinity Award - Sealant Category was won by The Broward Financial Center Façade Sealant Repairs Project. While on stage to accept the award with Frank Zhong, Dow Silicones, and Aaron Williams, Western Specialty Contractors of America, Karen Zimnicki, Wiss, Janney, Elstner Associates, said "It really was a great team effort."

After the dimmed lights, excitement and loud music of the awards presentation, a coffee break was in order. Sponsored by Tremco CPG, Inc., members took a moment to rehydrate before turning back to the stage and Lurita McIntosh Blank, Raths, Raths & Johnson,

Inc., and her presentation Reroofing a Vernacular Treasure: Roofing Replacement and Timber Truss Stabilization at the Bauvais-Amoureux House. The presentation focused on the unique structure and preservation challenges working with vertical log structures. The Bauvais-Amoureux House was originally constructed in 1792 and is one of only three know poteaux-en-terre (posts in the earth) houses is Ste. Genevieve, Missouri, and one of only five surviving poteaux-en-terre structures in the United States. The house maintains the majority of its original fabric and presents a fascinating case study for intact and mostly undisturbed 18th century construction. Raths, Raths & Johnson has been working with the National Parks Service since 2020 to investigate the history and craft of this vernacular structure. As a part of a larger planned rehabilitation, stabilization of the distressed roof trusses is currently underway, as is replacement of the shake roofing. "This presentation was fascinating and out of the ordinary for work that we do," said an attendee. To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Past President Michael MacDonagh thanked Stan Wellinsky, Valcourt Building Services and Kelly McBride, Century Building Solutions for their time on the Board of Directors

When design/build is done right (see the Trinity Award Winning-project Restoration Design/Build of the Fulton County Courthouse), it saves time, money and delivers a superior product. Les ZumBrunnen, Mosaic Engineering & Consulting, PC, shared what happens when it is done poorly in his presentation Design Build – A Case Study in What NOT to Do. Using a design/build delivery method, a general contractor and an investor turned an early 1900's New Orleans warehouse/museum into 16 luxury

Golf tournament coordinator Rick Johnson, Master Builders Solutions (second from left), congratulates the winning foursome: Adrian Kristanto, Indo Karya Anugerah; Kenneth Edward, Indo Karya Anugerah; Joseph McGill, McGill Brothers, Inc. and Greg Neundorfer, W.R. Meadows, Inc. (not pictured)

condominiums in the historic French Quarter. Within a year, 14 of the 16 units had active water leaks. Mosaic was engaged to investigate the leaks. What they discovered was how decisions made during the design and construction process lead to an epic failure and why having an independent design professional is so important. This presentation was "fascinating and informative." To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Tuesday evening, the new board was showered with good wishes and congratulations during the Pass the Gavel Party, sponsored by Sika Corporation and held at Morimoto Asia Restaurant. Once most guests had made their way to the second story restaurant overlooking Waikiki beach, a dragon -followed by drummers- snaked through the crowd spreading good luck. The Iron-Chef-famed establishment served an array of Asian dishes including sticky ribs, rock shrimp tempura, spicy chicken wontons, vegetable spring rolls, chicken chimaki, a prime rib and whole roasted duck carving station, yuzu cheesecake, an Ube tart and tray after tray of uber-fresh sushi including tuna rolls, salmon rolls, shrimp tempura rolls, California rolls and avocado cucumber rolls. Circulating servers made sure there was always room on the table for another small plate or a refreshed cocktail. A jazz trio, sponsored by SITURA, INC, kept the energy high. Two henna artists, sponsored by GCP Applied Technologies, kept people gasping. Members choose unexpected designs to be hennaed onto hands, arms and more. It was a very fun evening.

The final day of the meeting began with another wonderful breakfast buffet, sponsored Tremco CPG, Inc. Emcees John Lambert, Stone Restoration of America, and Eric Verlander, EMSEAL Joint Systems, started the session by inviting Sean Dunham, Kawika's Painting, Inc., back up to the stage. Dunham presented the Aloha Lani Pool Deck Renovation. The Aloha Lani is a 359-unit condo building that was built in 1976. The pool deck sits atop the seven-story adjacent parking structure and had never been renovated. In addition to the need for a visual upgrade, the owners were prompted to action by PT cables that had popped out of the pool deck. Street space around the building was tight and there were two occupied units on the pool deck level, both of which made the work challenging. The renovation of the pool deck, and removal of the window into the pool on the sixth floor of the parking garage, was well received. "It was nice to have a speaker who has had a project local to our meeting location," observed one attendee. To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Saving the Day: Restoring a Historic Garden Court from Near Collapse was the final presentation of the 2023 Winter Technical Meeting. Jack Tabri, Alpha Restoration & Waterproofing, Nadia Anis, Ferrari Moe, LLP, and Amirsalar Pardakhti, Ferrari Moe, LLP, shared their restoration project located at 1111 Sacrament Street in San Francisco, California. The building is an 11-story brick masonry structure that dates back to the 1920s. The building has a garden court that is located over a two-level below-grade parking garage. What started as an evaluation of leaks into the parking garage ended with emergency shoring of the slab due to severe corrosion of the reinforcing steel of the structural beams. This was followed by extensive repairs of the slab and replacement of the waterproofing membrane and all architectural, hardscape and landscape features in the garden court. Extreme design challenges in this project were associated with maintaining the original concept and hardscape features. Construction challenges were due to access, age of the building, sequencing, scheduling and, of course, unforeseen conditions. To see the entire presentation, log in and go to www.swrionline.org/pastvideos.

Before The Clearinghouse session, members enjoyed a final coffee break sponsored by Innovative Waterproofing Solutions and had one last chance to talk with exhibitors. The Clearinghouse topic was Recruit & Retain: Finding & Keeping the Right People. Tom Gormley, Pullman SST, Inc., was the moderator and the panelist were: David Boyer, PROSOCO; Lurita McIntosh Blank, Raths, Raths & Johnson; and Dan Bagley, Otto Baum Company. Topics covered included non-competes, what to include in benefit packages, paid time off vs. sick leave/vacation, family leave, teaching young employees to communicate beyond texting, the value and management-time cost of mentorship programs and internships and more. A high-quality discussion was fostered by the range of experience on the panel and from the floor.

President Stace Grund then thanked speakers and attendees for coming all the way to Hawaii for the 2023 Winter Technical Meeting and reminded members to put the 2023 Fall Technical Meeting in Fort Worth, Texas on their calendars. See you in September!

Thank You

TO THE 2023 WINTER TECH SPONSORS!

Albion Engineering Company
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Tremco CPG Inc.
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Welcome Reception on the pool deck of the Alohilani Resort

Rising Stars Recognized by the Institute's Newest Award

Know someone who is a rising star within the Institute and the industry? Someone with significant professional achievements, who is forward thinking for the industry, is involved with the Institute and under 40? Nominate them for SWR Institute's new NextGen Leaders Award!

Who in your professional orbit is a rising star and should be considered for our NextGen Leaders Award? Please complete our online application at www.swrionline.org/nextgenaward. Please have application complete by July 28, 2023

This new Institute award will be given out to **three** winners at the Fall Technical Meeting and announced in *Applicator Magazine*, on Institute social media and in an all-member eblast.

HAVE QUESTIONS? Contact Nicole Dayoub, nicole@cranemartin.com, 816.472.7974.

SWR INSTITUTE SEALANT, WATERPROOFING & RESTORATION INSTITUTE

IT IS IMPORTANT TO PUT YOURSELF OUT THERE AND MAKE THOSE CONNECTIONS

***Applicator:* How did you get started in the industry?**

Stace Grund: I started in my family's painting business. I worked summers during high school and college as a painter, scrubbing paint brushes and cleaning up. They wouldn't let me paint for quite a while. A few years in, a foreman finally took mercy on me and taught me how to paint. When I graduated from college, I moved into the office where I learned project management and estimating. I was assigned to a senior guy in the company and he was my mentor. I have a Bachelor of Science in economics and a Bachelor of Arts in political science.

My dad was in the business when I started in the office. He was around for about 10 years of my career before he retired. That really helped me gain a lot of insights from him. Also, my mentor spent a lot of time with me and taught me a number of things. The unique advantage that I had because I was a part of a relatively small family business was that I got to sit in on our leadership/executive committee meetings right out of college. At 22, I was sitting in meetings hearing a higher-level discussion about a variety of topics and meeting with bankers and insurance people. By the time I was 27, I had already been in five years of executive level meetings.

July of 1991, I moved over to Tatley-Grund, with my partner at the time Ron Tatley. It was just Ron and me starting from scratch. I did all the estimating, all the project management, all the sales. Ron was the field operations guy.

***Applicator:* What do you enjoy most about being in the industry?**

Stace Grund: I like the satisfaction of the company producing something tangible and in the built environment. You can really see a difference by the end of a project. Now, as an office guy, I'm not actually out there doing the work but I do my part on the business side so I get to share in the product. I've enjoyed being a business owner. It sounds corny but I really enjoy seeing, especially now towards the end of my career, the development of younger people as they grow and expand their skill set and their abilities. Some of them really shine and are leaders and have a lot of horsepower. It's neat to see that from beginning to end. We've had some really long-term employees. We find field employees using online ads but most of the office staff are promoted from the field. We look to hire and promote from within and then provide them with whatever training is necessary. They really know our business.

> "I really enjoy seeing, especially now towards the end of my career, the development of younger people as they grow and expand their skill set and their abilities."

***Applicator:* How did you become involved with the Institute?**

Stace Grund: David Boyer with PROSOCO told me that joining would benefit me and my company and that he thought my involvement would benefit SWR Institute. He didn't give me much of an option, he just told me that I was going to join. I joined in 2012. My first meeting was 2012 Fall Tech in Seattle, my hometown. David also volunteered me, without telling me, to be a speaker at my first meeting. I knew one person in the room and I was the second person on the agenda. As it turned out, that helped. If you want to get the most out of an association, you've got to put yourself out there whether you are outgoing or shy. It was one of the best things I did. I am really grateful to David for pushing me into SWR Institute. Being a speaker has increased the value I receive from our membership because others can see what we can do as a company. Presenting lets others know about who we are.

***Applicator:* Has being a member of the Institute been a benefit to you or your company?**

Stace Grund: There have been a countless number of "$10,000 ideas" that have come from attending meetings. Like so many others at the meetings, you'll see me jotting down ideas to take back to the office and use. Through the relationships developed and mutual respect we have with other contractors, we've even gotten employees. I had an east coast contractor contact us to let us know they had a top field guy move to the Pacific Northwest. We would

never have had an opportunity to hire that individual if it wasn't for our relationships with other contractors. He was really good. It is important to put yourself out there and make those connections that help you gain mutual respect and develop friendships.

***Applicator:* What trends do you see impacting your company or the industry?**

Stace Grund: I am concerned about post Covid retirements out of the industry and the loss of skills that go with them. There has been a reduction in overall experience, which means a reduction in skills. This is all the more reason to provide training and look for a variety of sources, internally or externally, to make up for that skills gap. The retirements are by field workers and office workers. During Covid, the construction industry just kept working with only a short shutdown. I think Covid gave some people a chance to switch careers. Smaller companies are struggling with how to provide training and pay for it. I think that there is a realization coming that they will just have to do it. Training is a lot cheaper than having to do a bunch of rework with unskilled folks.

> "My goal is to increase membership and with that, the conferences are potentially better because there is more speaker availability, more networking opportunities, more friendships."

Another trend I see is the continuation of the availability of useful technology in construction. It just keeps increasing. For example, we use a wireless tablet on a cell signal that sends job photos directly into our cloud storage. We use a stylus to write all the information onto the photo before it gets dumped right into the job folder. This is so much more efficient than taking a photo, storing it on an SD card and walking it into the office to be uploaded. We are also using a moisture meter that uses Bluetooth, is cloud-based and has an app. Technology in the construction industry is a bit behind but it is coming along. Electronic timecards, daily work reports and everything safety is online; in the last 15 years, advancements have been getting faster.

***Applicator:* What are your goals for your presidency?**

Stace Grund: SWR Institute is of and for the members and the industry. So much happens because it is a volunteer organization and, even though the staff is great, the members do a lot of work. Membership seems to me to be the heart and strength of the association. For a long time, we've had a goal of getting to 300 members and potentially a little higher. Right now we're hovering in the 250-275 range. My goal is to increase membership and with that, the conferences are potentially better because there is more speaker availability, more networking opportunities, more friendships. Getting back to that 300 mark is pretty important. And of course, as we've talked about, training is very important.

***Applicator:* What do you want members to know about you that they don't already?**

Stace Grund: I have volunteered for over 32 years for the Salvation Army of Seattle/King County. In the last year and a half, I have been serving on the Salvation Army National Advisory Board. I was asked as a pretty young guy to volunteer on a local advisory council. I was struck by how humble the Salvation Army officers are and their drive to care and help other people. I see it every day. I am talking to someone in the Army a couple times a week. They are out there helping people every day.

I have also donated blood 186 times. I started in high school when I was a senior and I just continued doing it. My goal is 200 times.

I think people who know me think I am a big softie and this has been proven out by my three grandkids. They are four months, one year old and a two and a half year old.

APPLICATOR MAGAZINE SPRING 2023 AD INDEX

PECORA SILCOPRIME:

A Proprietary Primer For Bonding Of Acrylic Architechtural Wall Coatings To Existing Silicone Architectural Wall Coatings

HARLEYSVILLE, PA – Pecora is excited to announce the introduction of Pecora SilcoPrime, an STPU (silyl-terminated polyurethane) based interlaminary primer that is specifically formulated to promote the adhesion of exterior-grade, non-silicone-based architectural wall coatings when applied over existing silicone-based wall coatings. Silicone based architectural wall coatings may, over time, become unsightly due to atmospheric deposits of dust and dirt. Cleaning can be costly and only a temporary measure at remediation. Re-coating with high quality acrylic architectural coatings is not an option and is typically limited to silicone-based materials as most organic coatings will not adhere to the existing silicone-based coating. The solution is the use of Pecora SilcoPrime as an interlaminary primer which will act as a permanent bridge between the existing silicone base coating and the new acrylic architectural coating.

TYPES OF ARCHITECTURAL COATING PRIMERS:

The three most typical types of architectural coatings primers are listed below: (each comes with advantages and disadvantages):

1. **Oil-based/ Alkyd Primer (the most commonly used primer):** Used in exterior/interior application on various finished and unfinished surfaces, including wood, steel, metals etc. where fluctuations due to temperature is expected. However, high VOC and long drying time may make it an undesirable type of primer to some.
2. **Latex/ water-based Acrylic Primer:** Flexible and fast drying primer associated with low VOC levels and a simple water cleanup.
3. **Shellac Primer:** Used for interior coating applications, typically not as versatile as the other two previously mentioned types.

A primer is typically a pigmented or non-pigmented fluid applied material, designed to enhance the adhesion of various top layers of sealants, adhesives, and coatings to porous and nonporous substrates while providing a consistent foundation for application of subsequent coatings or sealants. A primer's main functionality is to modify a surface in order to provide a chemical or mechanical bridge, typically bonding a fluid material to a solid surface. Choosing the right primer for specific applications or surfaces is of paramount importance as it will ensure the durability of applied architectural coatings or sealants.

An exterior wall primer is an adhesion promoting prime coat for use when applying exterior grade water or solvent cut architectural finish coatings. Some of the typical benefits of primer use include enhancement of the wall coatings' appearance, ensuring higher performing finishes, providing top layer durability, blocking out odors, increased hiding of top coat, and reducing cost/ labor by eliminating the numbers of top coat applications.

SilcoPrime is a specially formulated translucent white prime coat utilizing a proprietary STPU based polymer system. When applied over clean and dry existing silicone-based wall coatings, it promotes the adhesion of most exterior-grade, acrylic based, architectural wall coatings (i.e. Pecora WeatherClad). This adhesion promoting, VOC compliant, low-odor, fast curing primer is specifically formulated to act as an interlaminar primer for restoration and enhancement of exterior masonry walls and EIFS panels with a preexisting silicone-based coating.

The SilcoPrime primer option is unique in that, traditionally, only a silicone-based coating would be considered compatible when refreshing or re-coating an existing silicone based architectural wall coating. With the introduction of Pecora SilcoPrime, an option now exists to apply acrylic architectural topcoats directly over existing silicone based architectural coatings. Advantages include cost savings, elimination of atmospheric contamination and discoloration typical of silicone-based coatings, and the flexibility to choose from a wide array of colors and coating manufacturers when considering a recoat application.

As with any re-coat project of significant scope, surface preparation, field testing, and close communications with the manufacturers technical group is a key to success. Pecora SilcoPrime represents a significant tool in surface preparation procedures when seeking a restoration option on buildings that have previously been coated with a silicone based architectural coating.

For more information on this product, please contact our Technical Services Support at techservices@pecora.com or by phone at 800-523-6688.

DOW EXPANDS PORTFOLIO OF SILICONE-BASED PRODUCTS FOR PHOTOVOLTAIC ASSEMBLY

Additional product offering advances company's support of renewable energy solutions

MIDLAND, Mich. – Dow (NYSE: DOW) today announced the expansion of its silicone sealant products to offer photovoltaic (PV) module assembly materials, furthering the global movement toward renewable energy. The newly launched DOWSIL™ PV product line with six silicone-based sealants and adhesives solutions can be used to deliver durability and proven performance for frame sealing, rail bonding, junction box bonding and potting, and building integrated photovoltaics (BIPV) installation materials.

The global transition to carbon neutrality and the desire for new and local energy sources to ensure reliable supply are creating a demand surge for high-performing, affordable, and renewable energy solutions throughout the supply chain. As the market for PV module assembly evolves to meet the rising demand for integrated building and infrastructure solar solutions, as well as large-scale solar power plants, the launch of the DOWSIL™ PV product line will provide customers reliable solutions with proven performance.

"As needs in the building and infrastructure industries evolve, our solutions must evolve with them," said Jean-Paul Hautekeer, global strategic market director for building and infrastructure solutions at Dow. "Our DOWSIL™ PV product line will allow us to deliver innovative, next-generation, silicone materials that support our customers' needs while helping to advance a more sustainable world."

With multiple global production sites and backward integrated supply chains close to customer manufacturing sites, Dow is uniquely positioned to offer demonstrated solutions locally to this growing and evolving market.

"There are many benefits to using these Dow technologies," said Hautekeer. "In addition to being both locally sourced and high performing, these products are meeting customers' needs for sustainability and innovation. Silicones are critical materials in the PV assembly and we are continuously working on more innovations within this product category, such as backsheet cracking repair solutions and solar cell encapsulation through silicone technology."

Aligned with Dow's continued commitment to its 2025 sustainability goal of delivering breakthrough climate innovations, the new solutions from the DOWSIL™ PV Product Line will help create a more sustainable world as a result of their increased net positive impact. Dow will continue to offer solutions for power electronics applications, inverter encapsulants, and the leading polyolefin elastomer (POE) ENGAGE™ PV Encapsulant product line. The full offering of Dow's entire portfolio for PV assembly, including its legacy ENGAGE™ Portfolio can be found at www.dow.com/solar

PLAZA DECK RESTORATION

AVM has a solution that doesn't require complete removal

Traditionally if your client's deck is leaking the only solution has been to shut access down to the entire area, completely remove all the overburden, scrape off the failed waterproofing, bead-blast the concrete to achieve the desired concrete profile and then install a new fluid applied system. This approach is expensive, slow, odorous and can be very frustrating for the occupants. Once the waterproofing is removed, it's a race to get it covered.

AVM Industries is proud to announce the introduction of our new heavy-duty Dual System Waterproofing membrane Aussie Tite 540. Aussie Tite 540 is comprised of a high-strength 60 mil thermoplastic PVC (Polyvinyl Chloride) with DuPont Elvaloy® KEE that is externally reinforced and integrally bonded to a patented Reactive Polymer Fleece (RPF) layer that activates immediately when it encounters water.

AVM Aussie Tite Dual Layer performance begins with a 60 mil PVC Membrane that is heat welded in the field, resulting in a continuous layer of robust and long-lasting waterproof protection. The secondary RPF layer is a bentonite-free, dust-free superabsorbent polymer-infused geotextile that activates and swells when it encounters water, providing self-sealing and self-healing capabilities in the event the PVC membrane has been damaged or breached. The RPF layer, when in confinement, will not only provide an active waterproofing barrier but will also prevent the passage of lateral water migration.

AVM Aussie Tite 540 is designed for horizontal deck applications for both new construction and restoration applications. Aussie Tite can also be used in tunnel and earth covered structure installations, green roofs, and backfilled wall basements. In restoration applications (deck or walls), this loosely laid product is unique in the way that is can be installed over top many existing waterproofing materials, including coal-tar pitch.

On a recent project in Corpus Christi, Texas, Aussie Tite 540 not only saved the owner money on the total cost of remediation, but also allowed the residents access to the pool during construction because it eliminated loud noise caused by heavy-duty deck prep equipment and fumes from a hot rubber kettle like originally planned. Furthermore, The Aussie Tite 540 system not only improved the construction schedule by over a month, but according to the waterproofing applicator, it had significant cost savings due to the following:

- They didn't need to scrape and sandblast the deck.
- It required less manpower
- Required less equipment, eliminating the need for a crane
- Was much easier to install versus a fluid-applied system
- 215 SF Rolls were easy to transport due to limited access

Applicator: JOBS Waterproofing & Restoration (A Valcourt Company)

Consultant: Curtainwall Design Consulting

Aussie Tite 540 installs quickly, can be electronically leak tested, and comes with a 20-year No Dollar Limit Aussie Guard Warranty, covering both material and labor.

SEALANT, WATERPROOFING & RESTORATION INSTITUTE

2023 FALL TECHNICAL MEETING

SWR INSTITUTE

September 24-26, 2023

WORTHINGTON RENAISSANCE
FORT WORTH HOTEL
Fort Worth, TX

SAVE THE DATE

VALIDATION PROGRAMS

For more information about the SWR Institute Validation Programs, contact SWR Institute headquarters at 816.472.7974 or online at www.swrionline.org.

VALIDATED PRODUCTS

LIQUID SEALANTS

ADFAST Corporation
Adseal DWS 4580
Validation Date: 6/30/20 – 6/29/25

Bostik, Inc.
Bostik Pro-MS 50
Validation Date: 6/06/22 – 6/05/27

Bostik 915/915 RT
Validation Date: 6/06/22 – 6/05/27

Bostik 900 Polyurethane Sealant
Validation Date: 6/3/22 – 6/02/27

Dow Silicones Corps.
DIAMONDLOCK CS
Validation Date: 2/11/20 –2/10/25

DOWSIL™ Contractors Weatherproofing Sealant
Validation Date: 1/26/21 – 1/25/26

DOWSIL™ Contractors Concrete Sealant
Validation Date: 12/15/22 – 12/14/2027

DOWSIL™ 756 Silicone Building Sealant
Validation Date: 2/03/22 – 2/02/27

DOWSIL™ 790 Silicone Building Sealant
Validation Date: 4/23/19 – 4/22/24

DOWSIL™ 791 Silicone Weatherproofing Sealant
Validation Date: 4/19/19 – 4/18/24

Dowsil™ 795 Building Sealant
Validation Date: 5/13/22 – 5/12/27

DOWSIL Contractors Paintable Sealant
Validation Date: 2/11/20 – 2/10/25

DOWSIL™ 758 Silicone Weather Barrier Sealant
Validation Date: 1/26/21 – 1/25/26

DOWSIL™ 995 Silicone Structural Glazing Sealant
Validation Date: 4/19/19 – 4/18/24

Indochem Cipta Mandiri
Xilflex Weatherseal NB
Validation Date: 1/20/20 – 1/19/24

Ikaseal 997 SG Plus
Validation Date: 1/11/2023 – 1/10/2028

Ikaseal 997 SG
Validation Date: 1/5/2023 – 1/4/2028

INDO KARYA ANUGERAH
IKASEAL 900NS
Validation Date: 12/3/2021 – 12/2/2026

Xilflex MS Construction
Validation Date: 7/20/2020 – 7/19/2025

IKASEAL 988
Validation Date: 4/6/2023 - 4/5/2028

IKASEAL 990WS
Validation Date: 4/6/2023 - 4/5/2028

IKASEAL MS-1022LM
Validation Date: 4/6/2023 - 4/5/2028

Master Builders Solutions
MasterSeal SL 2
Validation Date: 7/12/21 – 7/11/26

MasterSeal NP 150
Validation Date: 7/12/21 – 7/11/26

MasterSeal NP 100
Validation Date: 7/12/21 – 7/11/26

MasterSeal NP 2
Validation Date: 7/12/21 – 7/11/26

MasterSeal NP 1
Validation Date: 7/12/21 - 7/11/26

Momentive Performance Materials
SCS2000
Validation Date: 2/11/20 – 2/10/25

Pecora Corporation
890 FTS Silicone Sealant
Validation Date: 3/20/2023 – 3/19/2028

890 NST Silicone Sealant
Validation Date: 12/15/19 – 12/4/24

895 NST Silicone Sealant
Validation Date: 6/23/20 – 6/24/25

Dynatrol II Polyurethane Sealant
Date: 8/29/18 – 8/28/23

Dynatrol I-XL Hybrid Sealant
Date: 3/13/2023– 3/12/2028

NR-201 STPU Hybrid Sealant
Validation Date: 6/23/20 – 6/24/25

PROSOCO, Inc.
PROSOCO R-GUARD AirDam Validation
Date: 8/06/18 – 8/05/23

Sherwin Williams
Loxon NS2 Two Component Non-Sag Smooth Polyurethane Sealant
Exp: 6/26/18-6/25/23

Loxon SL2 Two Component Self -Leveling Smooth Polyurethane Sealant
Exp: 6/26/18-6/25/23

SIGA COVER Inc.
SIGA - Meltell 300 Series
Validation Date: 1/19/21 – 1/18/26

Sika Corporation
Sikaflex®-1A
Validation Date: 1/11/23 – 1/10/28

Sikasil® WS-295
Validation Date: 1/11/23 – 1/10/28

Sikasil SG-20
Validation Date: 7/26/19 – 7/25/24

Sikasil SG-20 Structural Glazing Sealant
Validation Date: 7/26/19 – 7/25/24

Sikasil WS-305 AM
Validation Date: 5/7/20 – 5/6/25

Sikaflex 510 AM50
Validation Date: 5/7/20 – 5/6/25

Sikaflex-511
Validation Date: 11/11/21 –11/10/26

Tremco CPG Inc.
Dymonic 100
Validation Date: 2/26/19 – 2/25/24

Dymonic FC
Validation Date: 5/6/19 – 5/5/24

Tremsil 400
Validation Date: 8/17/18 – 8/16/23

Tremco Spectrem 1
Validation Date: 9/23/19 – 9/22/24

Tremco Spectrem 2
Validation Date: 9/26/18 – 9/25/23

Soudal USA
Soudalseal 50LM
Validation Date: 8/14/20 – 8/13/25

Soudaflex PU35
Validation Date: 8/14/20 – 8/13/254

Soudalseal SL
Validation Date: 8/14/20 – 8/13/25

Soudalseal AP
Validation Date: 8/14/20 – 8/13/25

W.R. Meadows, Inc.
Pourthane NS Non-SAG Joint Sealant
Validation Date: 7/16/20 – 7/15/25

POURTHANE SL Self-Leveling Joint Sealant
Validation Date: 7/2/21 – 7/1/26

WALL COATINGS

Dow Silicones Corp.
DOWSIL™ Allgaurd Silicone Elasotermic Coating
Validation Date: 1/10/19 – 1/09/24

Mapei
Elastocolor Coat – Smooth
Validation Date: 01/22/19 – 01/21/24

Elastocolor Flex – Smooth
Validation Date: 01/22/19 – 01/21/24

Sherwin Williams
Loxon XP Flat
Validation Date: 11/18/21 – 11/17/26

DECK COATINGS

Master Builders Solutions
MasterSeal Traffic 2500 Primerless*
Validation Date: 6/28/22 – 6/27/27

MasterSeal Traffic 2575 Primerless*
Validation Date: 5/22/18 – 5/21/23

MasterSeal 2850
Validation Date: 10/24/2022 – 10/23/27

MasterSeal 2900
Validation Date: 10/24/2022 – 10/23/27

Pecora Corporation
Pecora Deck HB1000 Traffic
Validation Date: 4/6/21 – 4/5/26

Sika Corporation
Sikalastic Deckpro Traffic Systems
Validation Date: 7/30/19 – 7/29/24

Tremco CPG Inc.
Vulkem 951 NF Topcoat & Vulkem 360NF SL Basecoat
Exp: 5/16/18-5/17/23

Vulkem 350 SL Basecoat & Vulkem 346 Topcoat
Validation Date: 7/25/22 – 7/24/27

Tremco Vulkem 350 FC SL/951 Deck Coating System
Validation Date: 2/10/2023 – 2/9/2028

PRE–CURED SEALANTS

Dow Silicones Corp.
DOWSIL 123 Silicone Seal
Validation Date: 11/02/21 – 11/01/26

DOWSIL™ Silicone Transition Strip
Validation Date: 1/10/19 – 1/09/24

Tremco CPG Inc.
Spectrem Simple Seal
Validation Date: 8/15/22 – 8/14/27

VALIDATED TRAINING PROGRAM

AIR BARRIERS

PROSOCO, Inc.
Air & Water Resistive Air Barrier Training Program
Validation Date: 12/4/19 – 12/3/24

Tremco CPG Inc
Air Barrier Contractor Training Program
Validation Date: 4/27/2023 – 4/26/2028

DECK COATINGS

Sika Corporation
Sikalastic DeckPro Traffic Systems
Validation Date: 7/30/19 – 7/29/24

EXPANSION JOINTS

EMSEAL Joint Systems Ltd.
Joint Protection & Firestopping, Fire-Resistive Joint Systems
Validation Date: 10/27/21 – 10/26/26

MM Systems Corporation
Contractor Certification Thermal & Seismic Expansion Joint Systems
Validation Date: 2/26/19 – 2/25/24

FLUID APPLIED TRAINING

Innovative Waterproofing Solutions
Fluid Applied Waterproofing Training Program
Validation Date: 1/27/2023 – 1/26/2028

HOT APPLIED RUBBERIZED ASPHALT

Tremco CPG Inc.
Hot Applied Rubberized Asphalt Contractor Program
Validation Date: 4/26/19 – 4/25/24

JOINT SEALANTS

The George D. Alan Company
Introductory Sealant Application Training Program
Validation Date: 4/22/19 – 4/21/24

Sika Corporation
Removing the Complexity Training
Validation Date: 8/11/22 – 8/10/27

Tremco CPG Inc.
Elastomeric Sealant Contractor Training
Validation Date: 5/13/22 – 5/12/27

MASONRY

Conproco
Masonry Restoration Elements
Validation Date: 11/17/21 – 11/16/26

TRAFFIC COATINGS

Neogard
Traffic Coating Applicator Training Program
Validation Date: 1/18/19 – 1/17/24

Pecora Corporation
Pecora-Deck HB1000
Validation Date: 4/6/21 – 4/5/26

Tremco CPG Inc.
Traffic Coating Applicator Training Program
Validation Date: 1/14/21 – 1/13/26

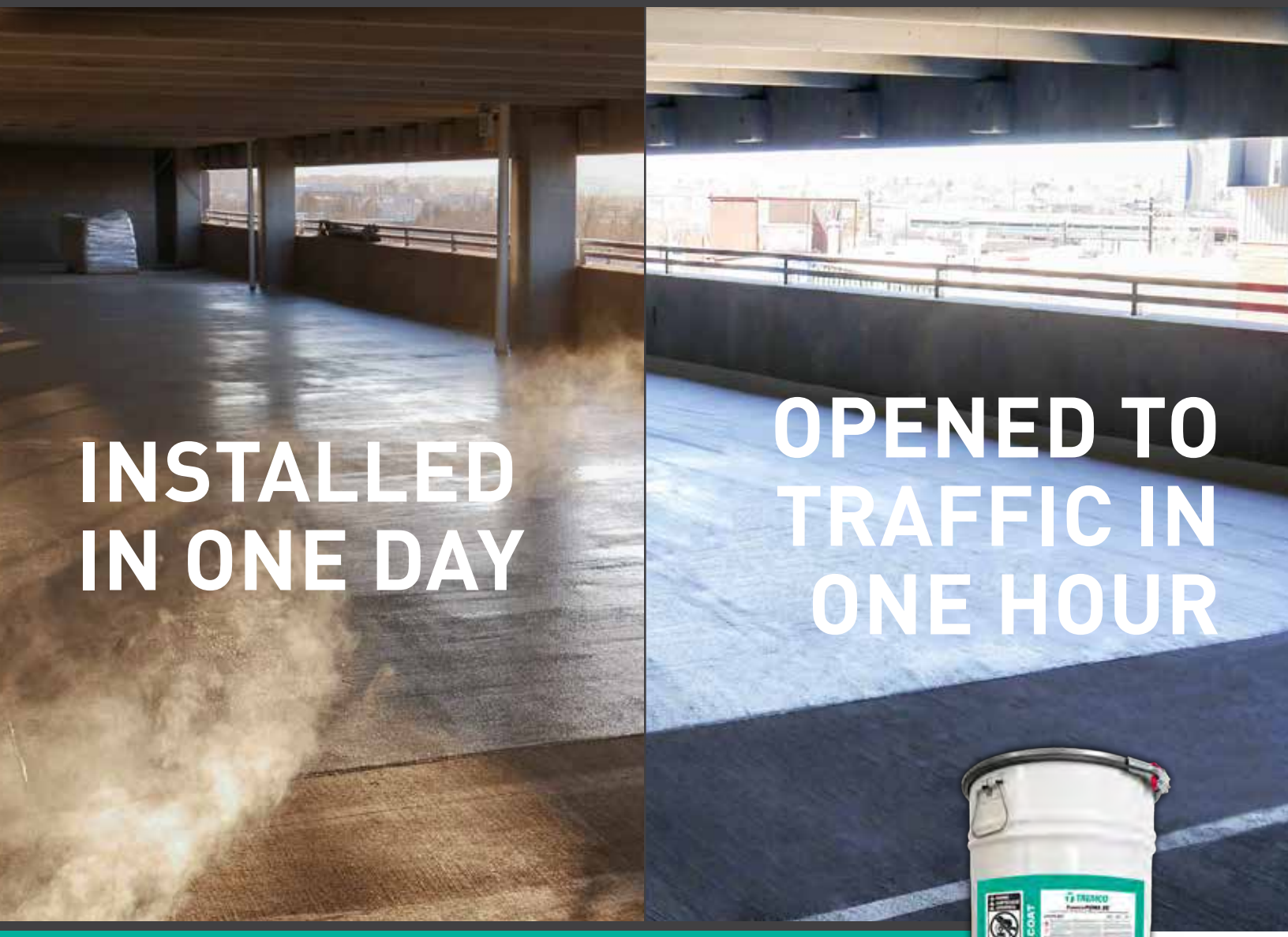
PUMA Technology Applicator Training Program
Validation Date: 10/15/21 – 10/14/26

WALL COATINGS

Master Builders Solutions
Wall Coatings Applicator Training
Validation Date: 5/20/22 – 5/19/27

**ownership of the validated product has changed and the new owner, Master Builders Solutions US is having this product re-validated*

Tremco and Willseal are now part of TREMCO Construction Products Group *See the difference at* tremcocpg.com



INSTALLED IN ONE DAY

OPENED TO TRAFFIC IN ONE HOUR

VULKEM® EWS TRAFFIC COATINGS *with* PUMA TECHNOLOGY ▸
WILLSEAL® 250R TRAFFIC-GRADE EXPANSION JOINT

Tremco's revolutionary traffic coating and waterproofing systems featuring Polyurethane-Methacrylate (PUMA) technology are changing the way owners and contractors think about parking garage restoration — achieving long-term protection against wear, abrasion, corrosion and environmental effects in a matter of hours — not days.

Our Vulkem® EWS Traffic Coating Systems can be opened to traffic in as little as one hour after installation is completed. And with material workable in temperatures as low as 14 °F, not even adverse weather can hold back your project.

Vulkem EWS systems pair with Willseal's best-in-class pre-compressed acylic-impregnated joint sealants — like the reinforced Willseal 250R — to provide tested, compatible solutions to address any vehicular, pedestrian or specialty traffic coating application.

Willseal®

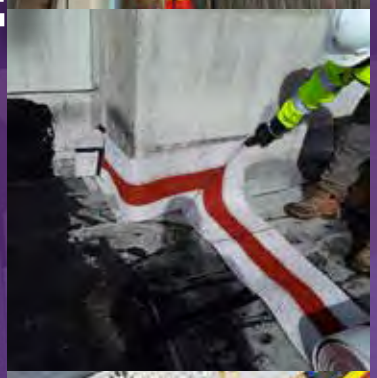
Learn more at ▸ TREMCOSEALANTS.COM/PUMA

TREMCO™

SITURA INC.

Waterproof Expansion Joints

ARE YOUR EXCUSES WATERTIGHT?



SITURA is dedicated to maximizing recycling efforts and committed to reducing emissions through sustainable product shipping and decreasing supply chain waste. SITURA offsets its fabrication and manufacturing carbon footprint with 100% renewable energy!

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EST. 1995

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