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COMMERCIAL AND INDUSTRIAL SCAFFOLDING
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COMMUNICATION IN THE NEW DECADE

By Ken Bowman

It is amazing that we are entering the third decade of this century! Time seems to be moving faster and this is not the plaintive cry of an old guy. Everyday advances in technology seem to push the envelope of time. The ability to keep up and not to be overwhelmed is a major issue.

This is particularly true in communication. Think about how much information surrounds you every day and how person-to-person communication is changing. In 2000 there were thirty million email users, and today there are 3.9 billion users with over 4.3 billion email accounts. Also, in 2019 there was an average of 293.6 billion emails per day. By 2023, it is expected that there will be 437.1 billion emails and 55% will be spam!

What about another platform that gets a lot of attention today? Twitter has over 500 million tweets a day. And, then there is Facebook, YouTube, Pinterest, Instagram, LinkedIn, Skype, Google, and other custom proprietary platforms, and the list goes on. Plus, there are new platforms being developed all of the time. The most successful new platform is TicTok, launched in 2016 by ByteDance, a Chinese developer. It already has 500 million users.

Why am I bringing all of this up? Because for trade associations like the Scaffold & Access Industry Association (SAIA), the number one goal is communication. Their mission is to help educate members and the industries they represent. The tactics utilized are not only the digital platforms mentioned above but also print media, face-to-face seminars/training, and membership meetings. Associations help keep members apprised of all the information that addresses the topics that appeal to industry issues and new products. Content that is important to the reader is presented in an easy, well designed format to read and keep. It is truly a major member benefit.

So, even though we cannot stop the challenges of 24/7 communication, we can be thankful for associations like the SAIA, whose volunteer leadership, members, and professional staff work hard to keep communication as accessible and manageable as possible.

About the Author

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SAIA: THE UNIFIED VOICE OF THE SCAFFOLD AND ACCESS INDUSTRY

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NEW GOALS FOR THE NEW YEAR

By James L. Holcomb

The year 2019 has come and gone – and it was a successful one for the Scaffold & Access Industry Association (SAIA). Please be sure to read about our accomplishments in this issue. Many, many thanks to all of the volunteers who made these achievements possible.

The new year brings with it more new developments and continued efforts. Again, this year, it will be up to our dedicated members, friends, and staff to realize our goals, as follows.

Education
• Launch the new Hazard Awareness Training Program with an online component.

Standards
• Work to ensure that the new American National Standards Institute (ANSI)/SAIA A92.20/22/24 standards for Mobile Elevating Work Platforms (MEWPs) take effect on March 1, 2020.

Membership
• Complete the update of the Competent Person Training (CPT) for Suspended Scaffold.
• Establish the Scaffolding, Shoring and Forming Institute (SSFI) verification program.
• Work to ensure that the new American National Standards Institute (ANSI)/SAIA A92.20/22/24 standards for Mobile Elevating Work Platforms (MEWPs) take effect on March 1, 2020.

And, as always, there will be unexpected challenges and opportunities to promote safe practices in our industry. Tim Oleszczuk, TKO Miller, LLC, told us at the 2019 Annual Convention that many companies were bracing for a construction downturn and potentially an overall recession in 12 to 18 months, but others closest to the construction industry held a more, positive outlook for 2020. Most of us will be keeping an eye on the economy and the trade and tariff situation and its impact on our companies.

It’s going to be another exciting and productive year. May you and yours have a safe and peaceful new year!
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Those who are of sufficient age know the question: What is it? Is it a bird, is it a plane, or is it a... scaffold? No wait, it's shoring. Or maybe, it's scaffold-shoring. What is it? Who cares? Well, if you are involved in the business of shoring, then you should care. For that matter, even if you aren't involved with shoring, but you are involved with scaffolding, you should care. (I do this, so you scaffold people keep reading the article.) A fascinating article in this issue is about Layher, Inc., D.H. Charles Engineering, Inc., and others who were involved with an interesting project for the Burning Man festivities in the scenic Black Rock Desert of northwestern Nevada. What was the structure? Was it shoring, was it scaffolding, was it neither, or was it both? Frankly, since it was at the Burning Man event, it could be just about anything. Here are a few questions that come up about shoring and scaffolding and the importance of making the differentiation.

**Question:** What's shoring?

**Answer:** One snappy answer involves holes in the ground. The potential client may be looking for the equipment that shores the sides of a trench, which is quite different equipment than shoring towers used to hold up stuff.

**Q:** Well, it isn’t the Scaffold, Trench, & Access Industry Association, so what’s shoring?

**A:** Shoring, as this industry knows it, is the equipment used to hold up other structures. It can be existing structures that need temporary support. Most commonly, shoring is the equipment that supports recently placed concrete while it is curing and hardening.

**Q:** Does the U.S. federal Occupational Safety and Health Administration (OSHA) or the American National Standards Institute (ANSI) have an official definition?

**A:** OSHA defines a shore as “a supporting member that resists a compressive force imposed by a load.” ANSI says that shoring is the “Temporary vertical support member in a formwork system, designed to carry the weight of the formwork, concrete and construction loads.”

**Q:** That sounds a lot like scaffolding to me. Aren’t they the same?

**A:** No.

**Q:** What is the difference between scaffolding and shoring?

**A:** Look at it this way: Scaffolding provides an elevated platform from which you can access your work while shoring temporarily supports another structure.

**Q:** If you use typical scaffold frames for shoring, is it scaffold-shoring?

**A:** You’re funny. No. It’s the use of the equipment that determines if it is scaffolding or shoring. You may call it a scaffold frame, but if it is being used as shoring, its shoring.

**Q:** What is falsework?

**A:** That term is used in several different contexts. In broad general terms, it is any type of temporary structure. More specifically, it refers to the shoring supporting bridges under construction. Additionally, OSHA, in 29 CFR 1926-Subpart R, Steel Erection, includes falsework as part of the steel erection process wherein the shoring towers (falsework) temporarily support the steel framing while the permanent structure is assembled [29 CFR 1926.750(b)(2)].

**Q:** Are the required safety factors the same for scaffolding and shoring?

**A:** No. For scaffolding the safety factor is a minimum of 4, 6 for suspension ropes, while the safety factor for shoring is set by the employer, if one is to comply with the OSHA regulations. ANSI requires that the loads include “a factor of safety consistent...”
with the engineered design of the type of shoring used” [ANSI A10.9.8.2.6].

Q: Are the guardrail requirements the same for scaffolding and shoring?
A: Of course not – that would be too easy. Guardrails, or other fall protection, is required on scaffolding when the platform is more than 10 feet above the level below, while it is six feet for shoring. The guardrail heights are also different, a minimum of 38 inches for scaffolding and 39 inches for shoring.

Q: Sounds like different OSHA regulations apply, true?
A: Yes. OSHA fall protection regulations for scaffolding can be found in Subpart L – Scaffolds, while fall protection regulations for shoring are found in Subpart M – Fall Protection.

Q: What if you erect the shoring to hold up something, just like they did at the Burning Man, but you use the tower to set up stuff?
A: Well, guess what: It's both scaffolding and shoring. First, since the towers are being used to support a temporary elevated platform, the towers are scaffolding, and workers should be utilizing fall protection since they are more than 10 feet above the level below. Somewhere during the process, those same workers will be placing the wood structure on top of what now will be shoring towers, instead of scaffold towers. Fall protection is now required at six feet.

Q: OSHA has specific platform and fall protection regulations for scaffold erectors. Do these regulations apply to shoring erectors?
A: No. Shoring-erector fall-protection regulations are in Subpart M while access requirements can be found in Subpart X – Stairways and Ladders. It should be noted that OSHA considers a shoring frame a “walking-working surface,” and therefore fall protection is required while climbing shoring frames. Interestingly, OSHA does not require such protection when climbing scaffold frames. That fact just might make you think about how you will classify your tower.

Q: What would be used as an anchor? Can workers tie off to shoring towers?
A: That's two questions. The answer to the second question is: They can tie off to whatever they want. The important question is whether the thing they tie to will work as a fall protection anchor. Shoring towers, just as with scaffold towers, can be used as anchors for fall protection, provided they are designed for such use by a qualified person. Many manufacturers require the design to be completed by a qualified Professional Engineer.

Q: Does U.S. federal OSHA require training for shoring erectors?
A: While there are no specific training requirements like those found in scaffolding, the training requirements found in 29 CFR 1926 – Subpart C, apply.

Q: What is Burning Man?
A: Google it. You’ll be amazed.

About the Author
David H. Glabe, P.E., is President of Glabe Consulting Services Inc. and Founder and Partner of DH Glabe and Associates. Glabe is SAIA’s Regulatory Liaison. Contact him at dhg@glabeconsulting.com.
Imagine this scenario. A large general contractor awards your scaffolding company a major job to deliver and erect an access system for a large project. You have done work with this general contractor before, so you’ve had contracts in place for prior jobs. Because you trust each other, and because you feel pressure to move quickly, you start work before ironing out the final details of the contract for this new job. Two weeks into the project, a portion of the scaffolding buckles. A worker on the project is seriously injured and later sues the general contractor. Believing they have additional insured status, the general contractor files a claim on your general liability policy. Despite additional insured status, the insurance carrier denies the claim because there is no written contract between the general contractor and your company for this specific project. This scenario is common, and it highlights the type of oversight that can drive a wedge between businesses and their valuable customers. Understanding standard risk transfer devices, such as additional insured endorsements and indemnification clauses, helps ensure your insurance coverage is working for you in the way you expect.

In risk management, a core purpose of contracts is to clearly define which parties are responsible for which risks. When it comes to workplace accidents or instances of bodily injury or property damage, the law can be ambiguous about assigning responsibility – without a contract clearly defining that responsibility, this can lead to long and costly litigation. Skilled executives and business owners use contracts and insurance not only to transfer risk but also to minimize disputes about which parties are responsible for which liabilities. Any good contract should include clear indemnification language that specifies how responsibility will be allocated if either or both parties become liable for injury or property damage.

A commonly used risk transfer tool is additional insured status, which allows one party a contract to receive insurance coverage under the other party’s policy. When indemnification language is clear in a job contract, additional insured status can help streamline the process of managing claims. That said, additional insured status is not a magic wand – it must be extended carefully and with a clear understanding of its limitations. Outlined below are common insurance and risk transfer mistakes.

**Common insurance and Risk Transfer Mistakes**

**Absence of a Written Contract:** If there is no contract for a specific project, the additional insured endorsement and certificate of insurance holds no value. Because appropriately worded contracts are legally binding in litigation, they can help protect a business in the event of a loss or dispute. It is safer to have contracts on a job-by-job basis instead of a blanket contract. If a company is a contractor, it must have contracts with any subcontractors to define insurance requirements and the division of liabilities. Once a contract for additional insured status is executed, the party added to the policy should receive a certificate of insurance to review the coverage and the policy’s limits.

**Retroactive Contracts:**

Fully executed and
Signed contracts by all parties need to be completed before project commencement. Contracts executed after the start of a project or after a claim arises may not be valid, voiding insurance coverage for any claim assumed under the contract.

Unclear Risk Transfer Language: Contracts need to explain which parties assume which liabilities and which parties have additional insured status extended to them. Numerous states have laws that require explicit language to make contractual risk transfer enforceable, and some states have banned these types of contractual risk transfer altogether.

Unanticipated Liabilities: Indemnity or hold harmless provisions formalize how the parties involved in a contract will divide risk and liability between each other. These agreements generally include specifics like the duration, financial limits, and scenarios in which the indemnity provision applies. You and your business advisors should carefully review indemnification language in the company’s contracts to ensure that any liabilities the company is assuming are reasonable, related to the work or product, and clearly defined.

Gaps Between Policy Language and Contract Language: Make sure that the insurance coverage reflects the requirements and indemnification language in the project contract. A general liability policy covers claims of bodily injury or property damage but not the cost of job delays or other financial losses. Further, many endorsements have language that limits when additional insured status or contractual liability coverage can apply. It is essential to understand what protections and limitations the coverage provides, and to work these limitations into the contracts.

Liability for Other Parties’ Negligence: Make sure that you limit your company’s responsibility for other parties’ negligence. Almost all states have laws that forbid or limit the transfer of liability that results from one party’s negligence.

Strategic Approach to Limiting Risk
Two main strategies will help you limit risk to your business:
1. Think Forward: Before entering into contractual relationships, consider the range of possible results of the agreement. When reviewing indemnification language, be clear-eyed about possible negative outcomes, including worst case scenarios.
2. Communication: Maintain continuous communication with your insurance advisor. When the stability of your business is involved, you need expert advice, and your insurance advisor is invested in the success of your business. Ongoing communication with your insurance advisor helps you understand your company’s policies, their limitations, and your company’s responsibilities as an insured. Additionally, an insurance advisor can share proactive strategies to help manage the total cost of risk. Should a loss occur, an insurance advisor will help navigate the claims process and act as your company’s advocate.

Utilizing contracts, endorsements, and policies correctly helps ensure that business partners are satisfied with your shared risk responsibilities. By understanding common risk transfer strategies and insurance responsibilities, your company will avoid claim denials by an insurance carrier, expensive litigation costs, and damaged relationships with established business partners. As a result, your company will be a more reliable partner, and this will help to build trust with your customers.

About the Authors
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WHEN GOOD SCAFFOLD BOARDS GO BAD

WHEN WOOD SCAFFOLD PLANK COMES BACK TO THE YARD, THESE GUIDELINES WILL HELP DETERMINE IF THE PLANK IS READY FOR THE NEXT JOB OR IF IT NEEDS TO BE RETIRED FROM SERVICE.

BY MICHAEL ALLEY
Scaffold plank takes many forms in the United States and across the world. Each area of the United States is unique, and a region’s environment can drastically change the expected life of wood scaffold plank. In general, wet and humid environments decrease the shelf life of wood scaffold plank. Both solid wood and laminated veneer lumber ( lvl) are susceptible to wet conditions with both types experiencing rot and with lvl at risk of delamination. Do you know what to look for to determine if your scaffold plank is in reasonable working condition? When wood scaffold plank comes back to the yard, these guidelines will help determine if the plank is ready for the next job or if it needs to be retired from service.

Plank Damage and its Many Forms
Like all wood and plant fiber products, scaffold plank is subject to decay and damage. Water is the number one enemy of plank. Boards that do not dry properly are at risk of rot. Telltale signs of rot include discoloration and boards that are lighter in weight than normal. A light-weight board with a normal-looking exterior may indicate that rot is occurring inside the wood fibers of a scaffold board. Chemical exposure can also result in board rot, including oxidizing acids and caustic mixtures like mortar and concrete. Sun exposure and significant temperature swings may cause wood scaffold plank to crack, split, and warp. Indian Mill installs a twisted steel screw perpendicular to the board face near the ends of solid wood scaffold plank to reduce the risk of cupping and splitting. Finally, board damage may also be caused by misuse, referred to as “caused damage,” including unloading and loading with a forklift or poor handling. “Caused damage” often translates to board splits and fiber tears to the board faces.

Visual Inspections and Choosing Good Boards
After each job, a visual inspection of wood scaffold boards is required. Plank inspection must be done by a qualified or competent person. The Occupational Safety and Health Administration (OSHA) defines a qualified person is someone in possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project. OSHA
describes a competent person as an individual capable of identifying existing and predictable hazards and who has the authority to make prompt corrective measures to eliminate them. A visual inspection of a board involves looking for a few key things: end splits, warping, narrow face splits, face breaks, saw cuts, notching/drilled holes/dents/depressions, and rot.

**End Splits**
End splits are a separation of the wood through the piece to the opposite surface due to the tearing apart of the wood cells. End splits are the result of repeated wet/dry cycles and handling abuse. An end split does not necessarily weaken a scaffold plank. End splits with length less than or equal to the plank width are repairable. An end split can be repaired using banding to keep the split from growing. Alternatively, a board may be cut back to eliminate the split. If a board is deemed non-repairable, it should be removed from service. Only trimmed boards that carry the designation stamp provided by an authorized lumber grader, such as the Dense Industrial-65 stamp, maintain that designation.

**Warping**
Warping is any deviation from a true or plane surface. Different types of warping include bowing, crooking, cupping, and twisting. Bowing is any deviation flatwise from a straight line drawn end to end. Crooking is a deviation edgewise from a straight line drawn end to end. Cupping is any deviation in the face of a plank from a straight line drawn edge to edge. Twisting is any deviation flatwise or a combination of flatwise and edgewise in the form of a curl or spiral. A qualified person will be able to identify these issues. Frequently, allowing the plank to dry more thoroughly can help correct these misalignments, especially in the case of cupping. When the issues exist and present a potential tripping hazard, the plank must be removed from service.

**Narrow Face Splits**
Narrow face splits are open splits on the narrow face of the plank that may be caused by handling abuse, forklift damage, or overloading. Narrow face splits are likely to result in board rot when exposed to the elements. Diagonal splits are likely to be accompanied by face breaks. It may be necessary to use a thin, stiff probe to distinguish a split from a shallow weathering check. Planks with open splits on the narrow face should be removed from service.

**Face Breaks**
Face breaks include a break on the wide face and are usually the result of overloading the plank. This results in a dangerous loss of strength. Any board with a face break must be removed from service.

**Saw Kerfs**
Saw kerfs, also known as saw cuts, may be found on the face or through the edge of a plank. A saw kerf across the plank face effectively reduces a plank’s thickness, which severely reduces plank strength. Saw kerfs can only be repaired by sawing off and eliminating the portion with the saw kerf.

**Notching/Drilled Holes/Dents/Depressions**
Other plank damage includes notches and holes. Some people may notch the end of boards to work around unique obstructions, such as pipes. This reduces the effective width of a plank and therefore a plank’s load carrying capac-
Proper storage, use, and visual inspection are key to maintaining a safe and long-lasting scaffold plank fleet.

Drilled holes can be found for many reasons, but these often result in an area prone to rot. Dents and depressions can be caused by boards falling or a heavy object falling on a plank. In addition, careless forklift operations may result in dents and depressions. When notches or holes are required, consult a qualified person to ensure the plank's strength has not been compromised. To reuse a plank with notching or drilled holes, saw off the portion of the plank that has the damage and remove that portion from service. Reuse of planks with dents or depressions should be at the direction of a qualified or competent person.

Decay and Rot
All wood-based scaffold planks are susceptible to decay and rot. Rot may occur because of water exposure, chemical spillage, or insect attack. Wood knots can be sources for rot to occur. Be aware of loose or broken wood knots, as this decreases a board's effective width and reduces a plank's load carrying capacity, similar to notching or drilled holes. Do not use a scaffold plank on a scaffold that was previously used as a walk board across wet, muddy ground or as a sill for a scaffold. Decay will occur when wet plank is stored improperly or has prolonged contact with the ground. (To read about proper storage of wood scaffold planks, refer to the January/February 2019 issue of the Scaffold & Access Magazine on pages 12-16.) Any planks displaying contamination, soft spots, and insect holes should be removed from service.

Be Prepared for Next Season
These guidelines will help you evaluate your scaffold plank inventory. These guidelines, however, are not inclusive and should not supplant or replace other additional safety or precautionary measures; be sure to contact a qualified wood specialist with questions or concerns. Every company wants its equipment to last as long as possible; but when when workers are involved, safety is paramount.

About the Author
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PLANK PERFORMANCE
IT’S IN THE DETAILS

BY MIKE GILLERAN
When looking to purchase new scaffold plank, there’s more to consider than whether the plank has proper stamps and credentials. Since there are so many types of plank products to choose from these days and each has its own unique structural design properties, it’s a very good idea to closely study the engineering behind each product, understand the performance differences, and then make an informed decision.

In general, there are two categories of wood plank offered today, “solid sawn lumber plank” and “manufactured plank” such as laminated veneer lumber or pinned lumber plank. Regardless of the type of wood plank, it is important to recognize that all types of wood plank have assigned strength properties that were determined through laboratory testing. These values directly influence the overall performance of any plank you are considering.

Since scaffold plank is used “flatwise,” the two primary design properties that determine a board’s ability to support specified loads over given spans are the extreme fiber bending stress and modulus of elasticity. Your plank supplier should be able to provide you this information and these properties should also be indicated within the stamp of the actual planks as well. The fiber bending value is most critical and corresponds to the measurement.
The two primary design properties that determine a board's ability to support specified loads over given spans are the extreme fiber bending stress (Fb) and modulus of elasticity (MOE).

of the board's resistance against an applied load and the amount of tension and compression of the actual wood fibers within the plank. Basically, it's an indicator of plank load capacity before the board begins to fail. The modulus of elasticity is a measurement of the planks' stiffness or the correlation of how much a plank will deflect or sag when a load is applied over a given span.

While there are other structural design properties determined during testing, these are the two primary strength values utilized by engineers when calculating and formulating the span/load tables that get published by a plank manufacturer. Both values are relevant, but contrary to what some people preach, it is the fiber bending value that has more credence when it comes to overall performance. The fiber bending value accounts for about 65% of plank strength, which is more relevant to the overall safeness of the product.

In simplistic terms, the higher the fiber bending strength (Fb), the more weight a plank will support before fracturing and breaking. The higher the modulus of elasticity (MOE), the more rigid or stiff the plank will be when the plank is stepped on, and planks with a low MOE can feel more springy. Boards that have a high MOE but low fiber bending value are weaker and may ultimately be less safe than planks with a decent or average MOE and higher fiber bending value.

So, why is this important to know? Well, the first thing to recognize when shopping for wood scaffold plank is that “you get what you pay for.” When comparing one wood plank product to another, there’s justification as to why a specific product with higher structural design values is potentially more costly than planks with lower mechanical properties. The product with higher design values is likely composed of higher quality wood fiber or better grade veneers and is ultimately stronger than others.
The next thing to recognize is that products with higher design properties will likely have longer service life. Over the course of time, plank products with higher values will likely last longer before the wood fiber within the plank begins to fatigue. Of course, the extended service life is all predicated upon how well the planks are cared for, the exposure to moisture and weather elements, and whether the planks were used improperly or possibly overloaded and abused.

Finally, understanding the relevance of the structural design properties, which helps to purchase planks that are safe and suitable for scaffold equipment, will ultimately help a qualified designer design scaffold assemblies that are cost effective and safe. Plus, having planks with better structural properties allows for more design flexibility because the boards will be suitable for both short and long span circumstances.

As the old adage goes, “The devil is in the detail.” Comparing the product literature and span charts of one product to another is helpful in learning about the general attributes of each, but from a performance standpoint, studying and comparing the structural design properties is crucial. Two products may look the same, and the literature of each may make similar claims, but from a technical standpoint, the products may perform completely differently in the long run.
THE GIFT OF SAFE ACCESS

THE GIFT OF A 100-METRIC-TON STRUCTURE REQUIRED CREATIVE SHORING SOLUTIONS THAT SAFELY TURNED ART INTO REALITY.

BY ROBIN J. KO, P.E., WITH BRUCE SCHEMA

Photo by Drone Genius
The annual Burning Man event draws tens of thousands of people to Nevada’s Black Rock Desert to create Black Rock City, described by the event’s website as “a temporary metropolis dedicated to community, art, self-expression, and self-reliance.” Every year, a custom-designed “temple,” a spiritual but not specifically religious structure, is designed and built by a group of volunteers, all with donated money, time, and effort.

Black Rock Desert is an ancient dry lakebed and considered one of the most remote and inhospitable places in the United States. Winds frequently exceed 80 mph, sometimes peaking in excess of 100 mph. These winds, combined with the ultra-fine dust from the lakebed, often create sustained, white-out conditions during the construction of this temporary city, home of Burning Man.

Temple Galaxia, a hollow, spiral mountain-like structure roughly 195 feet (60 meters) in diameter and 65 feet (20 meters) tall and weighing approximately 100 metric tons, was the centerpiece of the 2018 event. The temple was the vision of Arthur Mamou-Mani of London-based Mamou-Mani Architects and shaped from twenty triangular timber trusses converging as a spiral towards an open oculus. The structural engineering was done by Format Engineers, Ltd. to be self-supporting – but only once fully constructed.
The Galaxia scaffolding team worked for months to develop the complex construction sequencing plan and design but needed highly specialized scaffold engineering knowledge and experience to ensure the safety of the build team and structural integrity of the shoring design. To help make this vision a reality, Layher, Inc. and D.H. Charles Engineering, Inc. were brought in as integral members of the larger Galaxia team to provide expert advice, detailed engineering review, and creative problem solving to enable the construction of the massive and unique temple structure.

The scaffolding system was the very first thing that had to be built and was the last thing to come down before the crew could “gift” the temple to the 75,000 citizens of Black Rock City. Three massive scaffolds were constructed, one to support the Upper Crown pre-build, one to support the
Lower Crown pre-build, and the largest (called “S1”) to support the final structure consisting of Upper and Lower Crown sections that were craned into place. S1 was then surrounded by 20 lower “petal” structures installed one-by-one around the perimeter to support and complete the entire Galaxia. S1 also interfaced to the geometrically complex Galaxia structure via a double ring of massive timbers and a custom-engineered system of support “cradles.”

Layher provided the initial shoring concepts using their Allround Scaffolding system and was contracted to supply all the scaffold materials for the project with a very strict delivery and pickup window. In addition, they provided much needed field support that would be crucial to the success and safety of the enthusiastic but inexperienced volunteer crew who would
be constructing the scaffold systems, after some basic training and under supervision of experienced workers.

D.H. Charles’ scope of work was to review, design, and approve the cylindrical shoring system, roughly 53 feet in diameter and 26 feet tall, that was the primary support system for all the vertical and lateral loads from the phased construction of the Galaxia structure until it was fully constructed. D.H. Charles specified all the bracing and anchoring requirements and designed the timber interface system that would be used to transmit the loads imposed by the Galaxia structure to the scaffold/shoring system. Format engineers provided all the loads that would be imposed upon the shoring for the design, and representatives
for Mamou-Mani Architects dictated construction procedures that the shoring would need to support.

**Designed for Worst-Case Conditions**

A strict deadline to complete the shoring design process by the end of July was set, as the whole construction process was limited to an inflexible construction time-window in August. One of the project challenges was obtaining all the information that was pivotal to the design. Because no one was allowed on site until the actual construction window, there wasn’t any time to perform any initial site visits or testing to verify field conditions or soil anchor capacities. In addition, with the Galaxia design team spread across nine time zones, many in London, with the shoring design team centered in California, timely delivery of information and quick decision-making were constant challenges.

The design team attempted to account for every possible situation throughout the design process. They eliminated options like dead men blocks and heavy-duty anchorage due to time constraints. They were also limited by Bureau of Land Management (BLM) rules against any significant site excavation. Despite these challenges and constraints, the shoring design had to accommodate the full range of possible “on the fly” construction sequence changes. The three-phase Galaxia build required an unconventional top-down construction that would eventually place the full weight of the 100-ton temple on the cylindrical shoring tower, imposing multidirectional wind loads, dynamic construction loads, and unbalanced “lean loads” on the shoring throughout the process.

**Primary Shoring**

The primary shoring would initially need to support the roughly 20-ton weight of the upper and lower crown, which would also result in a top-heavy wind load. Then, as each of the 20 spiraling petals of the temple were installed, additional, very large, vertical, radial, and tangential loads would be introduced to the shoring system – mainly resulting from the
odd shape of the leaning trusses. Eventually, the shoring would need to support the worst-case scenario that would include the wind impact from the full profile of the Galaxia structure along with the imbalanced loading caused by the lean and twist of only half of the spiraling truss petals being in place. This resulted in a design requiring a spiraling bracing pattern to match the structure that it was supporting and extra shoring towers to prevent the individual petals from twisting during their installation.

**Anchorage System**
The second challenge would be developing an anchorage system capable of supporting such loads. Considering the “leave no trace” policy of the event, providing any concrete footings or dead men was out of the question. And given the remote desert location, using any heavy-duty anchorage that would require any specialized equipment would not be possible. Thus, the design was limited to low-capacity earth anchors, creating the need for 88 bracing points around the perimeter of the shoring, which would support the spider web of cable bracing required to tie down the shoring structure. To help facilitate the bracing process, an alternate option to use ratchet straps was reviewed and accepted, which proved to be greatly beneficial to the construction timeline due to the ease and speed with which they could be installed. Although the quantity of anchors seemed excessive at first, the scaffold/shoring team was thankful they were in place when high winds and dust storms strong enough to stop construction put them to the test, making the whole temporary structure hum from the vibration of the straps.

**Load Transfer**
The next challenge was to create an interface between the Galaxia structure and the shoring that could...
adequately absorb and transfer the loading. This cradle structure would need to be custom built to fit Galaxia’s unique shape, rigid enough to maintain the proper elevation for the Galaxia build and yet flexible enough to release the shoring from underneath the temple once construction was completed. Using timbers offered the flexibility to handle potential field variances and meet the unique factors involved in Galaxia’s construction process. Two continuous 6-by-12 timber rings were constructed over the top of the shoring legs supporting crossing timber ledgers with reinforced notches cut specifically to align with Galaxia’s spiraling truss petals. Another one of the positive field adjustments that was made during this installation process was to separate the timber ledger cradles from the rings and mount them directly to the lower crown. This allowed the lower crown to be placed on the shoring with greater flexibility and freedom of movement.

After 22 days of construction, 12-hour workdays, and over 10,000 man-hours in the extreme temperatures of the desert playa, the temple Galaxia was successfully completed to the cheers of the 140 volunteers from 19 countries who served as the construction crew. One of the most difficult parts of the process was removing the shoring, which had shouldered the brunt of Galaxia’s weight amidst dust storms and the construction process. Workers speculated that

the settlement of the Galaxia structure would be anywhere from one millimeter to complete and utter failure, but the whole timber cradle and shoring ring worked out as planned. Due to the forethought that was put into the scaffold/shoring design process, the erection volunteers were able to slowly and evenly lower all 44 U-head screw jacks and release the shoring from the Galaxia structure. The temple became self-supporting after settling about five inches once the shoring was removed, using only 50% of the total travel available with the screw jacks. Galaxia finally stood on its own on August 28 at 11:30 pm, no longer needing the critical, yet temporary, support of the shoring system.

The S1 shoring was manually removed at sunrise the next morning, and Galaxia was presented as a gift to the city that afternoon. The giant void left by the shoring removal became the sacred space for the citizens of Black Rock City to celebrate, mourn, and contemplate.

About the Authors
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NEARLY IMPOSSIBLE SHORING

THE 2019 SCAFFOLD & ACCESS INDUSTRY ASSOCIATION (SAIA) SHORING PROJECT OF THE YEAR WENT TO PCI SCAFFOLD’S SEATTLE HEADQUARTERS FOR THE ENHANCED CIRCULATION/ELEVATOR RELOCATION PROJECT.

BY DARRELL KING
This project began when GLY Construction was approached by their client with a challenging request that seemed nearly impossible in the beginning, to create a shoring system to fully support the disconnection of a shear wall from the foundation. The request was to take an existing C-shaped shear wall/elevator shaft that was approximately 80 feet tall and 2 feet wide and rotate it 90 degrees. In order to do this, the shear wall would need to be completely supported and disconnected from the foundation below.

Shear walls have one main purpose: to transfer the building’s lateral wind and seismic loading from each floor level back to grade. Therefore, if the attachment is removed between a shear wall and the foundation, the wall will not only turn into a massive amount of dead weight but will also lose the ability to provide the needed support. This specific shear wall weighed in at roughly 1,500,000 pounds and needed to be supported by a complex shoring system that would not allow any portion of the wall to move more than 1/16th of an inch at any given time.

GLY Construction approached PCI Scaffold who quickly brought on D.H. Charles Engineering, Inc. in order to develop a plan for supporting this structure. The idea was to cut holes in
the shear wall and run beams through the holes to support the load once the shear wall was disconnected from the foundation below.

PCI Scaffold worked with D.H. Charles Engineering to design a structural shoring system to support a C-shaped shear wall and allow for a 10-foot-deep excavation to take place underneath the wall itself. The shear wall was 19 feet by 13 feet by 12 to 18 inches thick and five building levels tall. To accomplish this, PCI Scaffold used a combination of W40x431 and W27x281 beams to penetrate through the wall at different angles to support the shear wall at Level 1, while allowing it to hang down one level into the basement.

A Complex Shoring System Required
Multiple factors had to be considered when designing the shoring system for this task. Not only was it imperative that the beam layout provide adequate support for the shear wall, the wall itself needed to be able to span between the shoring beams. Another factor was that the excavation of the frozen soil would not be overloaded by the surcharge loading of the HSS10x10 columns supporting each corner of the W40x431 beams. Several iterations of the beam layout and countless calculations had to be completed to ensure that the shoring design would safely and effectively provide the needed support.

Between the combined efforts of PCI Scaffold and D.H. Charles Engineering, completing a certified design took roughly a month to produce. Originally, PCI Scaffold was brought onto the project to design and engineer the plan and nothing else. This changed in a very short period as GLY Construction requested that PCI Scaffold supply and perform the shoring construction as well. Initially, a re-shore system was put in place and surrounded the perimeter of the shear wall area. This consisted of cuplock scaffold/shoring platforms placed on every floor level up to the roof. The next step was cutting the holes in the shear wall itself
for placing the beams around and through the structure to support and hold the shear wall in place.

Once holes in the wall were cut, the W40x431 beams were rolled into place on Level 1 and passed through the wall. Then the W27x281 beams were set atop the W40x431 beams to support the perpendicular wall. The 1,500,000-pound design loading and the distance of the beam spans caused too much deflection. As a result, staying within the 0.16-inch measurement was not possible. To solve this problem, PCI Scaffold provided cuplock shoring platforms spanning from the basement to the roof, giving support to the shear wall tributary slab loading. With these in place, the W40x431 beams would only need to support the 12-to-18-inch-thick shear wall.

Hydraulic Jacks Controlled Deflection

Hydraulic jacks were placed to preload the wall prior to being cut from the foundation. This occurred in ten jacking phases at three different jacking location. During each jacking phase, the target jacking load differed at each location. This process ensured that the shear wall was equally loaded and that no single location would collect too high of a load. Once all of this was in place, the shear wall was able to be cut away from the foundation below. Of the 0.16-inch design deflection, the hydraulic jacks were used to preload the beams to 0.14-inch deflection. By doing this, PCI Scaffold allowed the beams to deflect .02-inch, far below the .0625-inch requirement.

The design phase began in November 2017. Installation of the shoring system began in February 2018 and was completed in May 2018. The shoring system stayed in place until December 2018. Throughout the entire process, PCI Scaffold was able to stay ahead of schedule despite the magnitude of the project.

About the Author

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SAIA: A YEAR TO CELEBRATE

THE MANY ACCOMPLISHMENTS AND MILESTONES ACHIEVED IN 2019 ILLUSTRATE THE VALUE AND BENEFITS THAT MEMBERS OF THE SCAFFOLD AND ACCESS INDUSTRY ASSOCIATION ENJOY.

BY CATHEE JOHNSON PHILLIPS
For the Scaffold & Access Industry Association (SAIA), 2019 was a year in which many ongoing projects came to fruition and event attendance was at an all-time high. As a result, the association made significant progress towards filling the goals of the SAIA’s Strategic Plan for 2015-2024, which focus on Membership, Education, Resources, Communication, and Codes & Standards.

Membership
Goal: The SAIA will increase member value for the purpose of expanding and diversifying membership.

- Membership retention was 91%, with 43 new members joining, for a total of 456 members.
- The SAIA’s premiere events saw record-setting attendance, with 150 attendees and guests and 27 first-time attendees for Committee Week and 481 attendees and guests and 178 first-time attendees for the Annual Meeting.
- This year, the Annual Convention introduced new educational tracks, including Professional, Soft Skills, and Technical Tracks, as well as customer forums.
- The Exposition was sold out, with 60 exhibitors filling the hall.
- The SAIA completed the ground
work to roll out the new and improved Advantage Membership Program, where vendors offer SAIA members discounts for everyday services and products.

The new program will be launched in January 2020.

**Education**

Goal: The SAIA will provide high quality professional development activities that increase the level of competency for those working in the scaffold and access industry.

- The Competent Person Training (CPT) program for Supported Scaffold was updated and released in January 2019, and based on feedback during its first six months of use, a revision was released in November 2019.
- The CPT program for Suspended Scaffold advanced to the review process and will be ready for release in 2020.
- The SAIA launched a new Learning Management Software (LMS) system for the Accredited Training Institute’s (ATIs).
- The SAIA is developing online courses for the general public and ATI instructors.

**Codes & Standards**

Goal: The SAIA will influence the development, understanding, and promotion of published codes, standards, and other regulatory bodies of work for those in the scaffold and access industry.

- After a decade of work and collaboration between the SAIA and the American Society of Safety Professionals (ASSP), the revised A10.8 Scaffolding Safety Requirements were approved in February 2019.

**Resources**

Goal: The SAIA will be the primary resource for industry data, technical knowledge, and regulatory guidance.

- The SAIA Councils, under the oversight of the Regulatory and Review Committee, worked to update codes of safe practices, check lists, and other resources available to the membership.
- The Scaffolding, Shoring and Forming Institute (SSFI) Committee began work again, after being brought under the SAIA’s umbrella.

**Communication**

Goal: Deliver effective communication as the voice of the scaffold and access industry.
The SAIA launched its new website, found at www.saiaonline.org.

The SAIA also updated its membership database, in order to give members the ability to maintain their own records and offer an up-to-date online membership directory.

Two new committees were formed to provide an avenue of communication for SAIA members regarding training and programming, the Outreach Training Committee and the Program Planning Committee.

“The accomplishments of 2019 would not have been possible without the contributions of our members who volunteered countless hours to promoting safe practices in the industry,” said DeAnna Martin, SAIA executive director. “The new year will bring more opportunities for meaningful fulfillment of the association’s strategic goals. We are looking forward to seeing what 2020 will bring.”

Invitation to Participate
SAIA members and friends are encouraged to provide input and feedback regarding the association’s efforts, publications, and resources. The 2020 Committee Week, which will take place April 27-30, in Kansas City, Missouri, is one of the best ways to get involved. Read more about the week and register on the SAIA website.

A VALUE-DRIVEN MEMBERSHIP

The Scaffold & Access Industry Association (SAIA) brings continued value to its members, as evidenced by the 91% membership retention rate in 2019. The benefits reported as most valued by the members include:

• The sense of community within the association;
• Opportunities to network with a targeted audience specific to the scaffold and access industry;
• Free subscription to SA Magazine;
• Discounts on advertising in the SA Magazine;
• Discounts on registrations for both Committee Week and the Annual Convention & Exposition;
• Opportunity to exhibit at the Annual Convention, a member-only benefit;
• Opportunity to be a sponsor of Annual Convention, member-only benefit;
• Updates on industry-related news;
• Opportunity to become an Accredited Training Institute (ATI) with SAIA University;
• Access to Competent Person Training (CPT);
• Belonging to the association that serves as the Secretariat of the American National Standards Institute (ANSI) A92 and A11 standards; and
• Access to scaffold and access experts for education and networking.

To join the SAIA, a truly member-driven association that is dedicated to the scaffold and access industry, contact Brandi Fox, SAIA membership manager, at brandi@saiaonline.org or 816-595-4833. For more information on available training courses, contact Jackie Brown, SAIA associate director and training liaison, at jackie@saiaonline.org or 816-595-4843.
THE CUSTOMER’S VIEW:
SAFETY FIRST

Having a good safety record does not necessarily mean your company will get every project it bids on; certainly, price matters as does a creative approach to meeting the customers’ needs. However, if your company has a high Experience Modification Rate (EMR) and Occupational Safety and Health Administration (OSHA) Total Recordable Incident Rate (TRIR) rate, it’s almost guaranteed that your company will not get the project. In many instances, your company will not get past the pre-qualification to even bid the project.

So, assuming your company passes the first test, let’s talk about what sets a company above its competitors.

Safety Training
A safety training program for employees is a necessity. If your company is in a market that is primarily union, the local has training programs for entry-level apprentices, first period, and subsequent increased levels of training, second through fourth period, and then on up to foreman and general foreman. Topics covered in the Carpenters Union Training Program include:

- Completion of OSHA 30-hour safety training;
- Scaffold 40-hour Competent Person Training;
- Fall protection training; and
- First aid and CPR training.

Additionally, a scaffold specialist “A” must have satisfactorily completed the Scaffold Layout Class, the
Mike Thompson said, “I’ve always taken the approach that ‘if it were easy, anyone could do it.’ So, why not take on a new challenge by being the first to exhibit at the Scaffold & Access Industry Association (SAIA) 2019 Annual Convention and Exposition as a scaffold sales consulting company? My purpose or intent was to expand on the earlier presentation made at the 2019 SAIA Committee Week, ‘Own it! Scaffold Sales Training Program – Customers’ View of Your Company.’ Banner in hand, 75 copies of my presentation from Committee Week, some 100 pens with the Scaffold Consulting, LLC logo and ‘Customer’s View of Your Company’ mirrors, I was all set to go.

“Then comes the X-Factor! How does one convince a group of his peers that you can improve their business through lessons learned over the past 47 years? Success breeds success, and knowledge offers possible change in the way we do things.”

The SA Magazine is honored to present this series on achieving success in scaffold sales. The next article in this series will be “Customer’s View II: Steps to Grow Your Business and the Business Model that Other Companies are Looking to Acquire.”

Leg-Load Calculations Class, and the UBC Industrial Scaffold Qualification Class. Finally, the worker must have a minimum of 4,500 verifiable hours of scaffold-related work experience.

If your company is in a primarily non-union market, all employees should carry a scaffold card verifying that they have been trained in the proper execution of erecting and dismantling scaffold. The card should be updated regularly, with hours worked and training received, for promotion to various levels of management. There are several Scaffold & Access Industry Association (SAIA) members who can provide qualified OSHA 10-Hour and OSHA 30-Hour training for frame and brace, systems scaffold, shoring, and swing stage access.

**Mandatory Foreman Safety Meetings**

Monthly foreman safety meetings should be mandatory, in which discussions could include whether there have been any citations from OSHA (preferably none), near misses, employee concerns, or discipline issues. Other items could include upcoming projects, manpower requirements, and recognition for exceptional performance on completed projects.

**Jobsite Documentation**

Both pre-job and daily jobsite documentation are required as follows:

- Potential hazard identification, including overhead protection and safe practices for falling object protection;
- Daily job safety analysis (JSA) that identifies work to be completed and any potential areas of concern;
- Daily inspections of completed work or work to be completed using color-coded tags.

**Color-Coded Tags**

A green tag signifies that the scaffold has been erected to meet Federal and State OSHA specifications and is safe for all craft work. A yellow tag means that the scaffold has a condition or potential hazard about which the scaffold user should be warned.

All employees working on this scaffold must wear and use an approved safety harness. The red tag warns employees to “KEEP OFF – Do not use this scaffold.” This scaffold has been erected, taken down, or has been found defective.

**Written Safety Program**

Circling back a bit, all scaffold companies should have a written safety program. While this article has been primarily tailored to that of frame and brace and systems scaffold, there are specific safety guidelines that apply to swing stage, shoring, frame and brace, and even Perry- or Baker-type utility scaffolds.

If your company owns it and markets it, then the company should provide their customers specific safety guidelines for the same.

Know also that every major customer that your company works with or for (be it in a commercial market, power/utility market, chemical and refinery markets, paper mills, and so on) have their own written safety programs. They are guaranteed to be much more inclusive than that of your company’s scaffold-specific requirements. Companies must become familiar with their customers’ regulations, because they will have to play by their rules. Review all non-specific scaffold hazards in their work environment that could affect work and productivity. Also be aware that their scaffold-specific safety program may be more restrictive – for example, they may require a 4-foot above-ground tie-off.

In closing, remember that your company is only as good as its last project. A single poor performance spreads quickly among the industry. There are too many other companies out there waiting for an opportunity. Conversely, if you deliver an on-time, incident-free, quality-built product, to the customers satisfaction, your resume will grow expeditiously. Always strive to be the best of the best.

**About the Author**

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LET YOUR VOICE BE HEARD
Collaborate with peers. Discuss industry issues. Gain knowledge. Help us shape our future.

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  get information on current projects, emerging trends, and upcoming programs and initiatives

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  meet the leaders of the Association and learn more about how you can get involved

**REGISTER NOW AT**
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"I have never, never had communication with the field like this before."

Michele Farinaccio,
Eagle Scaffolding Services, Inc.

CREWTRACKS IS NEW TECHNOLOGY PARTNER IN THE SAIA

CrewTracks, the company that provides the field management software of the same name, joined the Scaffold & Access Industry (SAIA) last year. The software became available through the Google Play Store and Apple App Stores in 2017 and quickly found a home in the masonry industry and then in the scaffolding and access industry.

MDM Scaffolding, Skyline Scaffold, Inc., Eagle Scaffolding Services, Inc. were CrewTracks first customers from the industry. Brett Fairbourn, CrewTracks vice president of marketing, said, “To the surprise of no one who knows David Johnson at Skyline Scaffold, we soon had a lot of great feedback coming to us through the lens of scaffolding and access. I have personally enjoyed working with David, Amy Johnson, Michele Farinaccio, Michael Paladino, and others I’ve met in the SAIA.”

Based on Johnson’s invaluable feedback, CrewTracks added the ability to add hyperlinks, phone numbers, and email addresses in the app and improved the customizable schedules list. The company also added a document management feature, which allows customers to view drawings and plans as well as fill out PDF forms for safety meetings, inspections, and checklists.

Scaffolding and access continues to be an industry of focus for CrewTracks. Fairbourn said, “Since joining the SAIA, every experience we have had in the industry has reinforced that decision. The association staff and leadership, the member companies, and our fellow vendor members have all been incredible. It’s an amazing community, and we are proud to be part of it.”

To learn more about CrewTracks, call 801-742-5555, email Fairbourn at brett@crewtracks.com, or visit their website:
- Scaffolding-specific information page: crewtracks.com/sa;
- On-demand mini demo of CrewTracks: crewtracks.com/preview; and
- What makes CrewTracks special: crewtracks.com/vision.
The effective date for the new American National Standards Institute (ANSI)/Scaffold & Access Industry Association (SAIA) A92 Suite of Standards for Mobile Elevating Work Platforms (MEWPs), originally scheduled for December 2019, has been changed to March 1, 2020. Members of the ASC A92 Main Committee voted on and approved this extension during their annual meeting on Wednesday, October 30, 2019.

A decision by the ANSI Board of Standards Review (BSR) regarding appeals submitted on ANSI/SAIA A92.20 and A92.22 resulted in a limited revision on language that violated the ANSI Commercial Terms Policy. These limited revisions were balloted and approved by the ASC A92 Main Committee and were out for public comment until November 10, 2019. After the close of the public comment period, a 30-day recirculation ballot and a 30-day appeals period are required before submitting the final proposal to ANSI. Once the ANSI BSR has received the final submittal, the appellants will have an additional 15 days to submit an appeal to the ANSI BSR.

The SAIA, which serves as the secretariat for the ASC A92 Committee, and the A92 Chairmen will continue working with both appellants during this process. Actions being taken in an attempt to resolve the continued issues include forming a Commercial Terms Violation Ad hoc, providing more guidance on the ANSI Lack of Dominance Policy, instituting additional policies and procedures for the A92 sub-committees, adding three licenses agreements on the SAIA Manual of Responsibilities (MoR), and reporting on A92 Standards and MoRs financials.
SAIA ANNOUNCES RESULTS OF ODD-REGION BOARD ELECTIONS

The Scaffold & Access Industry Association (SAIA) recently announced the results of its Board of Directors’ (BOD) elections for Regions 1, 3, 5, 7, 9, and 11. The new slate of odd-region directors, who serve a three-year term, includes:

- Region 1, Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont: Alan Kline, Lynn Ladder & Scaffolding Co., Inc.
- Region 3, Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia: Mike Bredl, Universal Manufacturing Corporation; Barney Hanna, Tractel; and Roger A. Jetton, Scaffolding Solutions, LLC.
- Region 5, Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin: Marty Coughlin, Dependable Scaffolding, LLC; Eric Ringstad, Prime Scaffold, Inc.; and Kurt Bostater, BilJax by Haulotte Group.
- Region 7, Iowa, Kansas, Missouri, and Nebraska: Dwight Allenbaugh, A-1 Scaffold Manufacturing, Inc.
- Region 9, Arizona, California, Guam, Hawaii, and Nevada: Harold Gidish, Sky Climber, LLC and Linda McCurdy, SkyLine Scaffold, Inc.

AGF ACCESS GROUP SELECTED FOR BOW RIVER BRIDGE PROJECT

Montreal-based AGF Access Group (AAG) was selected by Flatiron/Aecon Joint Venture (JV) to provide temporary stair towers and engineering services for twinning the bridge over the Bow River as part of the major Calgary Ring Road Project in Alberta, Canada.

Workers will access the formwork system of the pylons and superstructure during its construction by means of 142 feet of AAG’s temporary stair towers, positioned almost 30 feet away from the bridge’s concrete pylons.

The erection of the main bridge towers is currently underway. The estimated completion of the bridge is 2022. More information about the new bridge can be found by visiting: https://www.alberta.ca/west-calgary-ring-road.aspx.
SKY CLIMBER ACCESS SOLUTIONS CELEBRATES 4-YEAR ANNIVERSARY

Sky Climber Access Solutions, headquartered in Santa Fe Springs, California, celebrated its four-year anniversary in November. The company started with one container of suspended-scaffold products from Sky Climber, opened its Santa Fe Springs office two years ago, and has grown to be one of Southern California’s leading suspended access companies. Learn more about Sky Climber Access Solutions at skyclimber.com.

NATIONAL LADDER SAFETY MONTH IS MARCH 2020

The Fourth Annual National Ladder Safety Month runs from February 23 thru March 31, 2020. The event, sponsored by the American Ladder Institute (ALI), is dedicated to the promotion of ladder safety in an effort to decrease the number of injuries and fatalities caused by unsafe ladder practices.

Companies can get involved and spread the message in a variety of ways, such as becoming a sponsor, hosting a ladder safety training event, and sharing information across all marketing and social media channels. For more information, visit https://www.laddersafetymonth.com.

WALKING-WORKING SURFACES CORRECTIONS NOTICE

The Occupational Safety and Health Administration published corrections in minor errors and clarifies requirements in the Walking-Working Surfaces and Personal Protective Equipment (PPE) standard in the Federal Register on December 17, 2019. The corrections were effective immediately. Among the corrections was one regarding the gate strength of snaphooks and carabiners. The standard now states that the gate of snaphooks and carabiners be capable of withstanding a minimum load of 3,600 pounds without the gate separating from the nose of the snaphook or carabiner body by more than 0.125 inches. Read more by going to federalregister.gov and searching for the issue.

ALUMINUM STAGES

Load ratings available:
One man – 250 lbs.
Two man – 500 lbs.
Three man – 750 lbs.

Stock sizes available:
12’ to 28’ wide
8’ to 32’ in length
Guard Rail Systems to match

TRUCK RACKS

1. Rear end bar swings 180°
   and locks in place.
2. Torsion bar truss adds strength.
3. Cab-over extension is standard.
5. Powder coated black or Stainless Steel.

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AlumaSafway and the Infinity Métis Corp have announced the AlumaSafway Infinity Joint Venture, a partnership between AlumaSafway and the Infinity Métis Corp supporting the local indigenous community. This partnership agreement creates the largest indigenous scaffolding, insulation and coatings provider in Canada.

The AlumaSafway Infinity Joint Venture will provide scaffolding and industrial access solutions along with other specialty services such as insulation, fireproofing, coatings, and refractory to safely increase productivity on shutdowns, capital projects, and ongoing facility maintenance work in Canada. As a result of the partnership agreement, there will be greater employment opportunities for indigenous workers in Canada’s oil sands industry and many other companies in Canada.

AlumaSafway is part of Brand Industrial Services, Inc., known in the marketplace as BrandSafway. Infinity Métis Corp is the business arm of the McMurray Métis.

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