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GUEST EDITORIAL

WORKER PARTICIPATION FOR SAFETY AND HEALTH PROGRAMS

Ted Beville

This is the third of a series of articles discussing the Occupational and Safety Health Administration (OSHA) Guidelines for Safety and Health Programs. OSHA has created dedicated webpages to support the implementation of resources and tools to support these guidelines. The following text is taken from those webpages.

To be effective, any safety and health program needs the meaningful participation of workers and their representatives. Workers have much to gain from a successful program and the most to lose if the program fails. They also often know the most about potential hazards associated with their jobs. Successful programs tap into this knowledge base. Worker participation means that workers are involved in establishing, operating, evaluating, and improving the safety and health program. All workers at a worksite should participate, including those employed by contractors, subcontractors, and temporary staffing agencies.

In an effective safety and health program, all workers:

- Are encouraged to participate in the program and feel comfortable providing input and reporting safety or health concerns.
- Have access to information they need to participate effectively in the program.
- Have opportunities to participate in all phases of program design and implementation.
- Do not experience retaliation when they raise safety and health concerns; report injuries, illnesses, and hazards; participate in the program; or exercise safety and health rights.

Note: Where workers are represented by a union, it is important that worker representatives also participate in the program, consistent with the rights provided to worker representatives under the Occupational Safety and Health Act of 1970 and the National Labor Relations Act.

Action item 1: Encourage workers to participate in the program. By encouraging workers to participate in the program, management signals that it values their input into safety and health decisions. To accomplish this:

- Give workers the necessary time and resources to participate in the program.
- Acknowledge and provide positive reinforcement to those who participate in the program.
- Maintain an open-door policy that invites workers to talk to managers about safety and health and to make suggestions.

Action item 2: Encourage workers to report safety and health concerns. Workers are often best positioned to identify safety and health concerns and program shortcomings, such as emerging workplace hazards, unsafe conditions, close calls/near misses, and actual incidents. By encouraging reporting and following up promptly on all reports, employers can address issues before someone gets hurt or becomes ill.

CONTINUED ON PAGE 34
On the job, we know you can't afford snow days. Put down the hot cocoa so you can put down a Strong Man Snow Removal Tarp over your jobsite before imminent snowfall. Time-sensitive projects in areas with unpredictable weather deserve the ultimate protection, so let Strong Man lift everything…even a blizzard.
Have you recently looked at the guiding philosophy of the Scaffold & Access Industry Association (SAIA)? You can find it under “About SAIA” on the SAIA’s new website. Our philosophy is captured by our mission, our vision, our core ideology, and our core values and becomes a way of doing business through our strategic plan.

Providing training and resources that encourage safe practices is at the heart of our philosophy and plan. Consider one of the plan objectives for improving our education program, “Expand and improve deliverables to meet the needs of membership and industry.”

How are we doing in making this a reality?

Expanding and Improving Training
The SAIA has brought its training programs into the digital age through the use of learning management software (LMS) for its Competent Person Training (CPT). The LMS houses the content and student information and is accessible on computers or smart phones connected to the internet. The first phase was recently launched and allows the SAIA Accredited Training Institute (ATI) instructors to use the LMS to communicate with each other and SAIA headquarters and also to submit classes and grades digitally. This is our first step to online processing; the second phase will result in the creation of a student portal that provides students with access to their records and history.

I’m also pleased to report that the SAIA has increased its training presence at the World of Concrete (WOC) 2019. We are offering CPT in Suspended Scaffold, Frame Scaffold, and System Scaffold, as well as offering our two-day “Effective Manager” leadership course. The SAIA will also be holding a reception; be sure to join us!

The theme of the World of Concrete is “We don’t stop.” That theme is addressed to the concrete and masonry industries, but it’s also applicable to the scaffold and access industry, as we provide the access these and other industries need to do their job. The work to promote safe practices continues every day and moves forward one step at a time, with the launch of the LMS, with expanding our training efforts at WOC.

There are many other ways that the SAIA is making its philosophy a way of doing business. We need your feedback and input to do so successfully. Please don’t hesitate to contact the staff or leadership with your thoughts and comments.

On behalf of Karen and my family we want to wish everyone a safe and happy holiday season!

Providing training and resources that encourage safe practices is at the heart of our philosophy and plan. This work continues every day and moves forward one step at a time.

WELCOME TO OUR NEW MEMBERS

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Michael Gratcofsky
973.948.5511
Branchville, New Jersey
Heimbecker had spent 25 years in the field as a carpenter, journeyman, and supervisor. For the last five years, he’d moved into producing preliminary scaffold drawings and estimates. When he started out, Heimbecker would hand-sketch scaffold designs and manually calculate materials and prices, a time-intensive process. “Doing a hand drawing isn’t very pretty. It definitely wasn’t an asset to give that to a client,” he said.

With Heimbecker’s limited computer skills, using complicated software such as AutoCAD wasn’t an option. After testing out two scaffold design programs, he and his colleagues at Phoenix decided to go with Avontus Software’s Scaffold Designer.

The Solution
Despite his lack of advanced computer skills, Heimbecker says it didn’t take him long to become proficient in the software. “It’s very user-friendly. For me, being computer illiterate, it works out very well,” he says.

The software has helped THAT Group improve efficiency and reduce costs. Instead of relying on an engineer to create a conceptual drawing, Heimbecker can make one himself and send it to the engineer for approval. That means he can produce drawings in an hour, instead of two or three days, and the company saves up to $1,500 on each design. “That cost savings can be your profit on the job,” Heimbecker says.

The benefits of efficiency extend to existing projects. For example, one client called on a Saturday asking for a modification to an approved design. Heimbecker was able to redo the drawing in an hour.

The software saves the company time and improves accuracy by automatically calculating material counts and weights, as well as leg loads. Tanner estimates that improved accuracy in material counts increases profits by up to three percent a year. The team believes that using the software is one reason that the company’s revenues increased by more than 400 percent annually in the two years after it added a scaffolding division.

About the Author
Ali Hajighafouri is Global Sales Director at Avontus. Contact him at ali@avontus.com.
Scaffolding, because of its versatility, can be used in countless ways, by limitless trades, to accomplish miraculous results. Consequently, questions invariably arise regarding the safe construction and use of scaffolding. Here are a few to consider. To challenge yourself, answer the questions before reading the answers given in the article.

1. Does the industry need the Occupational Safety and Health Administration (OSHA)?
2. Why do the OSHA regulations only apply to private employers and not to government employers?
3. Do the OSHA regulations apply to employees?
4. Do all states have to comply with the federal OSHA regulations?
5. Why is there an OSHA regulation requiring scaffold inspections prior to each workshift?
6. Do you always need a base plate on a supported scaffold leg?
7. Do scaffold users need training? And if so, why?
8. Are aerial lifts scaffolds?
9. What is a scaffold?
10. Where can I buy OSHA-approved plank?
11. Does OSHA approve anything?
12. Does scaffold training require documentation?

Answers

1. Does the industry need OSHA?
   In a perfect world where all employers provide a safe workplace for employees, and employees utilize the best workplace practices to minimize and eliminate injuries and deaths, no. But this is not a perfect world.

2. Why do the OSHA regulations only apply to private employers and not to government employers?
   Because that is what the OSH Act (Occupational Safety & Health Act of 1970) states. However, a number of states have enacted laws and programs that include local government employees in safety and health programs similar or identical to the federal OSHA program.

3. Why are scaffold accidents a leading cause of deaths?
   Yes, users need training so that they don’t hurt or kill themselves or others on the scaffold.

4. Are aerial lifts scaffolds?
   Yes, but as a special category. The applicable regulations are exclusively in 29 CFR 1926.453.

5. What is a scaffold?
   Good question; it is any temporary elevated platform and its supporting structure used to support workers or materials or both. That means when you stand on the table in the lunch room to fix the ceiling light you are standing on a scaffold.

6. Where can I buy OSHA approved plank?
At the OSHA plank store at 200 Constitution Avenue in Washington, D.C. (Be sure to read the next question and answer.)

11. Does OSHA approve anything?
No. Therefore, there is no such thing as an OSHA-approved plank nor is there an OSHA plank store.

12. Does scaffold training require documentation?
No. Anyone who asks for that documentation is in violation of the federal Paperwork Reduction Act of 1980, and as amended in 1995, and is subject to arrest by the Federal Bureau of Investigation.

13. Who determines if it is feasible for erectors to tie off to scaffolds?
The employer’s competent person is responsible for that decision, not the safety guy on the project, nor the OSHA compliance officer.

14. Where can I get OSHA scaffold training?
From people who provide scaffold training. Make sure the instructor is qualified in the subject matter and knows what he/she is talking about.

15. What’s a Letter of Interpretation?
Letters of Interpretation are issued in response to a citizen inquiry concerning an issue. It is an opinion and therefore is not a regulation nor does it change any regulations. While regulations can only be changed through the rule-making process, opinions provide an avenue for OSHA to express a view on what it thinks the regulation means or how it may be applied to a particular situation.

16. What is ANSI?
ANSI is the American National Standards Institute. It is an organization that promulgates consensus standards. The committees include members from industry, government, academia, manufacturing, safety, engineering and other professions.

17. Are there any ANSI standards for scaffolding?
Yes; it is ANSI A10.8-2011.

18. Since a two-point suspended scaffold has guardrails, why do I have to utilize personal fall protection?
You need to be protected in case the platform, to which the guardrails are attached, disappears.

19. Why are scaffolds so dangerous?
They aren’t; you just think they are. You are much, much more likely to die getting to the jobsite than being on the jobsite.

20. If I construct a stairway using scaffold components to access a building, is it a scaffold?
No; it is a construction stairway, and OSHA 29 CFR 1926-Subpart X, Stairs and Ladders, applies.

21. Are scaffold accidents a leading cause of deaths?
They are only if you die using one. A properly constructed scaffold is completely safe.

22. Why are qualified engineers required for the design of certain scaffolds?
Because they know stuff other people do not.

23. Is overloading the scaffold the same as collapsing the scaffold?
No. You can overload a scaffold long before it will collapse. If you choose to collapse a scaffold, you are way beyond overloading it.

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 SAA’s Regulatory Liaison. Contact him at dhg@glabeconsulting.com.
The luxurious Ritz-Carlton Hotel in Naples, Florida, is an iconic landmark on the Gulf of Mexico and is one of the oldest hotels of the current Ritz-Carlton brand. The resort recently closed down operations for three months – for the first time in its 27-year history – to receive a massive facelift. According to the Ritz-Carlton Hotel Company’s website, this multi-million-dollar renovation is one of the largest refurbishment projects ever undertaken.

Complete Property Services (CPS), a general contractor based in Tampa, Florida, was contracted to do a complete top-to-bottom exterior renovation of the sprawling hotel with 14 floors, 450 guest rooms and penthouse suites, restaurants, ballrooms, and more. The entire building needed to be wrapped in scaffolding. Access to all levels was required to perform the necessary work on all balconies, patios, and decking and stucco repairs on all vertical and horizontal surfaces on every floor, along with various other modifications.

According to Scott Garrett, a CPS superintendent, they were essentially tasked with completing work that would ordinarily take around nine months to complete in approximately four months, June through September. This was due to the time frame of the heavy tourist season in Florida, which can be almost year-round.

The Challenge
To accomplish this amount of work in such a short period of time, CPS knew they were going to have to keep the job flowing as efficiently as possible. They needed to provide access to the building and scaffold at all levels and also needed a plan for the efficient movement of materials and some 140 workers up and down 14 stories.
One common mistake that contractors make on multi-story projects is that they plan for access to the building to do the work needed, but they don’t really have an adequate plan for moving people and materials up and down on the job. This lack of planning leads to bottlenecks and delays that can be avoided. Some common time-killers include: using swing stages or work platforms to get material instead of feeding materials to the workers in position; workers having to use stair towers to move equipment and materials; limited accessibility to hoists or elevators; and sharing crane time with other trades.

The Construction Institute cites studies that have shown that in many, if not most cases, skilled workers on large construction projects spend LESS THAN HALF of their time producing or doing their work. The remainder of their time is spent on prep work, waiting for equipment and tools, material handling, and other related tasks.

The Solution
Fortunately, CPS realized that to get everything done in such a short time they needed to focus on the efficient movement of people and material to all levels. In addition to installing scaffolding
around the whole building and using swing stages, fork trucks, and Lull forklifts, CPS found the solution they needed at Sunbelt Rentals, which offers a turnkey service with Beta Max transport platforms. CPS was able to rent four hoists and have them installed in strategic locations around the job site. Due to the number of different trades and workers, and the extensive scope of work, the ability to have multiple transport platforms running simultaneously at different locations turned out to be an effective game plan that had a tremendous impact on productivity. CPS was able to reduce delays and downtime and keep the job flowing almost nonstop. Transport platforms are rack and pinion style hoists that meet the American National Standards Institute (ANSI) A92.10 code requirements and can be used to move authorized personnel and material. They travel on a mast that is anchored to the building or structure. Transport platforms typically have smaller capacities than larger hoists and are limited to a travel speed of no more than 40 feet per minute, but the tradeoff is that they are typically easier to install with less impact on the structure and are less expensive. Transport platforms are particularly useful for mid-rise projects that are not necessarily tall enough to justify the use of conventional buck hoists or construction elevators but are too tall to effectively move everything with forks, Lulls, and cranes. Not only do these hoists have lower pull-out and shear forces making them easier to install, the units that CPS rented for this project have a capacity of 3,000 pounds with a 13-foot deck, and so they provided the steady movement of material and authorized personnel that was needed. The design of the main hotel building features a first floor that extends out farther than

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the upper floors, so the hoists needed to be installed a good distance out from the walls of the upper floors to clear the ground floor and other architectural features. Because the forces generated from these comparatively lightweight transport platforms are less than larger construction hoists, the mast only needed to be anchored directly to the building on the first level. On the upper floors, it was possible to tie in to the scaffolding, with the load distributed throughout the scaffold that was anchored to the building.

Garrett said, “The lifts worked out perfectly for us because they were less invasive to tie into the building. We were able to minimize the damage to the building which was a big deal because of all the stucco repair we were already doing, and the load capacities could handle everything we needed to do.”

Project Takeaway: Plan for Moving People and Materials

When working on projects with deadlines that are tough to meet, it is crucial to find ways to reduce downtime, eliminate delays and bottlenecks, and increase
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**About the Author**

Troy Palmer is the Director of Sales and Marketing at Beta Max Hoists in Palm Bay Florida. Contact him at tpalmer@betamaxhoist.com.

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the percentage of time that productive work is accomplished. Streamlining the movement of personnel and materials on the job, particularly on multi-story projects, is one of the most effective ways to keep the job flowing to stay on or even ahead of schedule. Proper planning that goes beyond **ACCESS** and includes a plan for **MOVING** people and materials efficiently can make or break a large-scale project.

Fortunately, there are many hoisting systems and options available in the industry that can be utilized to get more done. With all the various features and functions, it is important to understand the differences and choose which type of hoisting solution is best for each application. In this case, transport platforms were extremely well suited for the project and had a big impact on the Ritz Carlton renovation timeline.

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**About the Author**

Troy Palmer is the Director of Sales and Marketing at Beta Max Hoists in Palm Bay Florida. Contact him at tpalmer@betamaxhoist.com.
R&R SCAFFOLDING IS THE SOLE SOURCE PROVIDER TO DESIGN AND SUPPLY PERMANENT FAÇADE ACCESS SOLUTIONS FOR EVERY BUILDING WITHIN HUDSON YARDS EAST OF 11TH AVENUE. CHALLENGING ARCHITECTURE HAS REQUIRED CREATIVE ACCESS SOLUTION.
Situated along the Hudson River, abutting The High Line at its entrance in Midtown Manhattan, Hudson Yards is on track to become the epicenter of the West Side’s dining, shopping, and culture. The six towers soon to surround the eastern half of the rail yard will encircle a public square featuring its sculptural centerpiece, brush up against the cultural center The Shed, and house both commercial and residential tenants. The imposing heights that reshape the New York City skyline enable residents to look out into sunrise over the East River or the sunset over the Hudson through their glass facades. The ambitious project is being overseen by Related Companies with general contractors and construction managers from Tishman, Gilbane, Tutor-Perini, and Siani providing major contributions. R&R Scaffolding, Ltd. is the sole source provider to design and supply the permanent façade access solutions for every building within Hudson Yards east of 11th Avenue.

Vessel
One of the most challenging designs is for the UK-based Heatherwick Studio’s Vessel.
The main challenge with accessing the façade of the Vessel with its 154 interwoven staircases is its geometry.
One-hundred-and-fifty-four inter-woven staircases draw a honey-comb one hundred and fifty feet into the air at the center of New York’s Hudson Yards development. Designed to be a public landmark, the Vessel immediately calls attention to itself, inviting visitors to climb its 2,500 interlaced steps to see the yard as they never have before. Manufactured in Italy in copper-colored steel, the $200-million steel sculpture presented R&R Scaffolding with one of its largest design challenges to date.

The main challenge with accessing the façade of this open-air structure is its geometry. As a person descends from the top, the “wall” gets further away, which is due to the vase shape of the structure, wide at the top, narrow at the bottom. This is further complicated by openings in the face of the structure and the need to access the underside of each overhang. The “honeycomb-like” geometry creates angled overhangs which also must be accessed. Lastly, the platform cannot come in contact with the metal façade.

R&R developed special davits and sockets that are installed at either the upper-most or mid-level, depending on the area being accessed. The ground-rigged platform is operated up to the davit. Stabilization is accomplished via a custom-made winch assembly that keeps the platform away from the façade and limits its free movement.

To enable the platform to follow the slope of the façade, the design team created anchor points (stabilization anchors) on the façade that allow the operators to connect the wire rope to the structure and pull the platform inward towards the center. These anchors are present throughout the drop to allow the operators to repeatedly connect and pull themselves in, allowing the façade to always be within reach.

To enable the platform to access the underside of the overhangs, the team developed an approach system. This system enables the platform to “telescope” inward and under the overhang, all while maintaining the suspension wire rope’s position. The angled overhangs led to the creation of an angled platform that mimics a stair case. The interior of the Vessel is accessed in very much the same way: ground-rigged; winch used for stabilization; both straight and angled platforms; and approach system. The only substantial differences are the slope angle, negative vs. positive, and the length of the platform, longer for exterior, shorter for interior.

10 Hudson Yards
The first completed tower, 10 Hudson Yards, sits at the southeast corner straddling the High Line. The office building, completed in 2016, serves as Coach’s global headquarters, hosting them alongside other world-renowned companies. Fifty-two floors of floor-to-ceiling glass, setbacks, and soffits presented R&R an opportunity to flex its creativity.

A building maintenance unit (BMU) sits at the top, able to handle the bulk of the task, while monorails, including a uniquely designed monorail with a hidden track and trap door, enable workers to clean the remaining glass – whether that glass be beside or above them.

The Shops & Restaurants
Next to the commercial spaces at 10 Hudson Yards, The Shops & Restaurants, featuring seven levels of eating and shopping, will open in 2019. World-class chefs will bring fine dining to The Shops & Restaurants alongside humble eateries like coffee, salad, pastry, and juice bars. Visitors can explore shops like Lululemon, Neiman Marcus, and H&M at this seven-level
center. R&R has furnished the building with a davit system and a platform specially designed to traverse the building’s soft positive slope, ensuring shoppers can peer into the temptations unobstructed by dirty or damaged windows.

30 Hudson Yards
Also scheduled to open in 2019, 30 Hudson Yards is the largest entry of uber-tall towers at Hudson Yards. A commercial office building set to house media giants CNN, HBO, WB, and a host of other companies, 30 Hudson Yards is the second-tallest office building in New York City. The commercial and residential tower tops out at 1,296 feet of glass-clad façade. A negative slope, triangular roof, and out-jutting observation deck – the highest of its kind in the city – required R&R to utilize everything in its toolbox, from davits to monorails to a BMU with a whopping 102-feet outreach. The scaffolding will service the building for years to come.

The Shed
Nestled on the west-east span of High Line and opening in 2019, The Shed will provide visitors a new opportunity for enrichment through the arts by playing host to a breadth of artistic works on the West Side, be they visual and performance art or popular culture. True to its artistic aspirations, The Shed is an architectural work that emphasizes innovation and experimentation. The Shed has glass from bottom to top, and inwardly and outwardly. A telescoping outer shell allows the cultural center to blossom outwardly to provide a 120-foot-tall performance hall or contract inwardly to allow the public space just outside to enjoy its full 17,000-square-foot performance area. To meet the challenge of a window washing system for a breathing building, R&R’s design includes two BMUs, one set upon tracks to service the fixed building, and a second, also set upon tracks, to service the telescopic shed.

15 Hudson Yards
Slated for completion by 2019, the fully residential building rises 910 feet into the skyline allowing lucky residents to take in full views of Manhattan and the Outer Boroughs. Those on the lower levels will enjoy no less beauty, as 15 Hudson Yards is directly adjacent to both The High Line and the newly-constructed cultural center at The Shed. One BMU on a track is up to the task of providing access to all 72 stories of glass. By placing the BMU on a short track inside its pit, so it can remain hidden when not in use, R&R was able to keep things simple and cost-effective.

35 Hudson Yards
Equinox Hotel will open in 2019 in this multi-use tower, which will also have commercial, residential, and retail space. One fixed BMU fitted with an approach system will facilitate maintenance of a full-glass façade that rounds out as it climbs to the top of this 100-story building.

About the Author
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SAIA 2019 Annual Convention & Exhibition
September 23-26 | New Orleans, LA

Cruise With Us Down the SAIA River of Opportunity

With a two-month shift in dates for Committee Week, the 2019 Annual Convention follows suit by moving to September. New Orleans plays host to the SAIA’s main event of the year, and you can be sure fun and festivities will be had when the day’s events wind down. It may not be Mardi Gras season, but NOLA offers up plenty of flavorful Cajun and Creole cuisine, Cafe du Monde’s famous beignets and chicory coffee, soulful jazz on every corner, and a colorful culture steeped deep in history.

The SAIA’s Annual Convention is like Committee Week on steroids! It’s networking with peers and industry experts. It’s making fruitful business connections with vendors in the Exhibit Hall. It’s learning something new during a session presentation that will help your business grow. It’s getting that training you’ve been putting off but really need. It’s participating in and shaping the future of the association that is here for YOU!

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Hydro Rents Carolina, Inc. delivered 30 tractor loads of equipment to provide a full-access solution for the Lexington Medical Center’s 545,000-square-foot expansion.

BY MELINDA ZIMMERMAN-SMITH
The Lexington Medical Center in Columbia, South Carolina, originally broke ground in 1968. It has grown in popularity with the surrounding communities over the course of five decades. According to USA.com, the Carolina Midlands has been experiencing a population boom so large that its growth rate is much higher than the national average, and Lexington and Richland Counties happen to be right at ground zero. The combined population of Lexington and Richland counties will be one million by the year 2037, a whopping 40-percent increase from today, according to estimates from the Central Midlands Council of Governments. A key consideration for the area’s future is health care services. Health providers are ramping up to handle the encroaching population upswell, and nowhere is that more clearly seen than at the Lexington Medical Center.

Billed as the largest hospital expansion in South Carolina history, the state-of-the-art 10-story patient-care tower in Columbia will add 545,000 square feet, 20 special-care nursery beds, eight operating rooms, 71 inpatient beds, and much more to the already popular facility.
Alabama-based general contractor Brasfield & Gorrie broke ground on the medical center expansion in 2016, and the project is scheduled to be completed in 2019. To help complete the enormous construction task on time, on budget, and safely, they called upon Carolina Hydro Rents to provide a full-access solution for the construction of the new expansion.

The massive job, stretching up to 185 ft, required a multi-trade access solution; one that would allow steel erection, glazing, waterproofing, caulking, brick masonry, and glass installations to be completed simultaneously.

“Scaffolding and aerial lifts just can’t go that high and offer the same kind of capability,” said Allen Heape, General Manager of Hydro Rents Carolina, Inc. “The only solution that was going to work for them was to use multiple mast climbers that supported extra high capacity for the workers and their tools at one time. That way the workers could chase the steel up and perform any number of tasks at a time.”

Hydro Rents started the job in June 2017 and delivered 30 tractor trailer loads of equipment to the jobsite, including 23 Hydro Mobile platforms and 1,500 mast sections to complete the job. This included 18 22,000-pound-capacity mast climbers and five 6,000-pound-capacity mast climbers. There were also four hoists to help move brick up and down.

The larger platforms provided the workers with seven-foot wide decks, anywhere from two to 10 feet in length. The easy-to-use, smaller platforms allowed workers to load them up with their tools and supplies for the entire shift. The smaller platforms were perfect for constricted areas where the larger units could not fit.

The high-capacity platforms supported approximately 60 installers, glazers, and masons as they worked at the same time while they labored to construct the building. With the hundreds of workers coming from a broad variety of disciplines, safety was a significant concern.

“Safety is a huge part of what we do on a daily basis, 24/7,” said Heape. “We take safety very seriously. Hydro Rents organized over 20 classes to train the workers, who were unfamiliar with this type of access equipment. Operators were put through four-hour user and operator courses on site, and anyone working on the platforms had to have a familiarization class before they stepped on the platform. We had to train over 100 operators how to use the equipment properly to ensure safety and efficiency on the jobsite.”

Hydro Rents covered safety awareness, fall protection, proper equipment usage, capacity limits, tie off instructions, outriggers, and safe operation. Brasfield & Gorrie provided a translator for the Spanish speakers.

“Training is a service we provide to our customers free of charge. We want everyone to be safe and for the job to be completed without incident,” said Heape. “This was the first time we had ever provided classes on such a large scale and for such a long duration. It took a lot of our time, but it made sure the job was done right, and that everyone went home safely every night.”

About the Author
Melinda Zimmerman-Smith is President of Lighthouse Communications. For more information about Hydro Rents Carolina, Inc., please visit http://www.hydromobile.com/en/distributors/hydro-rents-carolina.
Informa Exhibitions organizers expect World of Concrete (WOC) 2019 to see significant growth over WOC 2018—which was the largest event in nine years, with 58,000 registered professionals featuring 1,564 leading-industry suppliers exhibiting across more than 746,000 net square feet of space.

WOC will take place January 22-25, 2019, with seminars January 21-25, at the Las Vegas Convention Center. WOC will feature a week of new products, the latest equipment and technologies, spectator events and competitions, and more than 150 educational sessions including luncheons, interactive workshops, and hands-on training.

SAIA at WOC
The SAIA will offer the Competent Person Training (CPT) in Frame Scaffold one-day course on January 22; the CPT in System Scaffold one-day course on January 23; the CPT in Suspended Scaffold one-day course on January 24; and The Leadership Academy Effective Manager two-day course on January 23-24. The SAIA would like to thank Direct Scaffold Supply for donating the build equipment for the CPT training.

The CPT in Frame Scaffold and System Scaffold programs are designed for scaffold erectors and cover all the safety aspects regarding scaffold foundations, scaffold components, regulations, guardrail requirements, and erection and dismantling procedures for frame scaffolds that exceed the standard height to base ratio. The CPT in Suspended Scaffold program is designed for suspended scaffold users and covers all the safety aspects regarding suspended scaffold stages, ropes, regulations, guardrail requirements, fall protection, hoists, and installation components. The course format for the CPT trainings includes a combination of presentation, question and answer, a hands-on component and final exam. Early registration is encouraged, as advanced preparation is required. The fee for each CPT training is $350.

The special two-day leadership program is designed for individuals who demonstrate an interest in and capacity for growth within their companies. This program benefits managers and individual contributors alike—people who interact with internal and/or external customers, project team leaders, employees who serve on teams, or managers who want to enhance their knowledge, skills, and abilities to achieve exceptional and sustainable results. The fee for this course is $800.

Questions about these programs should be directed to Jackie Brown at 816-595-4843 or jackie@saiaonline.org.

Find the SAIA in Booth #C3335
The Scaffold & Access Industry Association (SAIA) will be an exhibitor at the 2019 World of Concrete, as will many SAIA members and friends. Find the SAIA in booth #C3335.
The 2018 Scaffold & Access Industry Association (SAIA) Innovation Award was presented to BrandSafway for the integrated access solution developed for the “Reimagine 900” project.

BY MATHIEU GRUMBERG
inished in time for the 2017 holiday shopping season on Chicago’s Magnificent Mile, the Reimagine 900 revitalization project gave every part of 900 N. Michigan Avenue a new look, with a focus on the main grand entry, facades, ceiling, lighting, interior décor and acoustics. The crown jewel of the renovation was transforming the existing atrium ceiling into a digital art installation with custom-produced images and videos projected on a 184-foot light-emitting diode (LED) display – the largest of its kind. A reimagined shopping experience indeed. But how do you provide access to the ceiling of a six-story, 30-foot-wide atrium without impacting shoppers and tenants? That, too, required imagination.

The building owners are highly conscious of the visitor experience and had some non-negotiable requests,
according to Jim Manning, senior superintendent at Pepper Construction Company, the general contractor for the renovation. “The customer dictated that we avoid scaffolding from the ground up,” he said. “Further, instead of scaffold, they wanted to see suspended swing stages to access all of the fascia work facing the atrium. Lastly, renovation work needed to occur at night, with all traces of construction cleaned up before building tenants and shoppers arrived in the morning.”

Further challenges included being able to transport all materials to the sixth level through a single freight elevator and then into a common area with Terrazzo tile flooring that could not be damaged. Access to the atrium would require overcoming two additional obstacles: load limits near the up and down escalators at the east end of the atrium and the 3-foot-high brass railing/glass banister ringing the atrium. Permanently connected to the floor, removing the railing would have been prohibitively costly.

An Innovative Solution
To find a solution, Manning turned to Spider and SafwayAtlantic. They integrated four different technologies to create a unique solution that may be employed elsewhere for interior renovations. To overcome the challenges of spanning the atrium while transporting materials in a freight elevator, the teams from Spider and SafwayAtlantic (both BrandSafway companies) recommended the HAKISPAN 750 modular system, which consists of lightweight aluminum trusses available in sections from 4 to 20 ft. long. The system can support a safe working, uniformly distributed load of 40 to more than 400 pounds per square foot, making it well-suited for a work platform for installing the LED panels.

To lift the modular system over the brass railing, the team created small-scale systems scaffold towers and set them on pads to protect the Terrazzo tile floor. W-6 steel I-beams were clamped to these towers. Specially engineered shoes and clamps secured the bottom of
the trusses to the beams. Altogether, the project required 460 trusses. Connected end-to-end, they would stretch for more than one mile. W-6 I-beam headers were then secured to the top of the truss system, and those headers supported the work platform.

Atrium fascia renovation drove the need for a suspended platform. Here, Spider engineers designed clamps to suspend aluminum I-beams from the modular system. After clamping the beams together and suspending them, the Spider team created what it believes to be the first monorail suspended from an aluminum truss system. Sliding the swing stages eliminated the need to move suspension points, allowing renovation work to proceed without interruption.

Pristine Access and Still on Schedule

Erection on this project was anything but normal. Because the building conducted business as usual during the renovation, materials had to be brought in on a nightly basis. SafwayAtlantic teams managed material delivery to limit the amount of unused materials sent back at the end of the day, as nothing could be stored onsite. Installation work time averaged five hours per night, with the other three hours spent transporting materials and cleaning up. The general public never saw work crews, dust, or clutter — just pristine scaffold and trusses.

The highly engineered, integrated access solution enabled erection in half the allocated time and reduced dismantle time to keep the project on time and within budget, as well as enabled other time-saving and safety efficiencies. The project was completed with zero recordable incidents and met all of the property manager’s requirements of minimizing impact on shoppers and building tenants.

About the Author

Mathieu Grumberg is an Engineering Manager for BrandSafway. He can be contacted at MGrumberg@brandsafway.com or 518-381-6000.
Have you heard?
Committee Week is moving to April in 2019. We’ll be heading to the Great Northwest’s City of Roses, better known as Portland. Brimming with a thriving arts and culture scene, acclaimed dining destinations, lush forests co-mingling with rolling hills, and endless outdoor activities, you can do just about anything you can think of in Portland.

If that’s not enough to entice you to make the trip, then how about what Committee Week is all about: having your voice heard, collaborating with peers, tackling new initiatives, gaining skills and knowledge through education and training opportunities, and shaping the future of the SAIA.

So mark your calendars now to attend the 2019 Committee Week in Portland, Ore., April 29 - May 2.

Andrew Smith has assumed the new role of vice president of operations at Avontus Software. This change will ensure that Avontus continues to deliver the finest pre- and post-sales support. In his new role Smith will be responsible for the operational and customer-facing areas of the business globally.

Prior to joining Avontus in 2014, Smith spent 11 years in the scaffold industry working with both large and small scaffolding contractors. He has extensive experience in project, site, contract, and branch management.

The Occupational Safety and Health Administration (OSHA) redesigned the State Plans webpage with a new color-coded, interactive map to simplify finding contact and jurisdictional information for each state. Users can also access frequently asked questions and details about State Plan activities. Find it at https://www.osha.gov/dcsp/osp/.

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STRONG MAN INTRODUCES NEW SIZE FOR CONSTRUCTION TARPS

Strong Man has introduced new 40-foot-by-30-foot-size heavy-duty and super fire-retardant (FR) tarps. The newest version of these tarps is the largest one yet, covering more surface area for enhanced protection.

“This is now the largest size we offer for this product and covers more square footage than ever before. This size will protect more surface area while making sure that Mother Nature stays outside, and heat stays inside so the job can move forward. Our customers saw the need for larger tarps on the jobsite and these tarps are the answer,” said Jay Kinder, president of Strong Man Safety Products Corp.

The Super FR Tarp is a general-purpose tarp for jobsite and weather protection made with advanced fabrication with four-inch reinforced hems, D-Rings and grommets around the perimeter and strengthened corners to ensure fast and easy installation. The center of the tarp features three internal seams with grommets used as an extra tie-off point to greatly reduce flapping in the wind.

The Heavy-Duty FR Tarp is a jobsite standard with rip resistant weave and two-inch reinforced hems. Rust proof grommets are spaced every three inches around the perimeter and on the three internal seams for an extra tie-off point.

These tarps, like all Strong Man fire-retardant products, are tested by a third-party lab to ensure compliance with NFPA-701 Method II and BFD IX-I fire-retardant standards.

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To accomplish this:
- Establish a process for workers to report injuries, illnesses, close calls/near misses, hazards, and other safety and health concerns, and respond to reports promptly. Include an option for anonymous reporting to reduce fear of reprisal.
- Report back to workers routinely and frequently about action taken in response to their concerns and suggestions.
- Emphasize that management will use reported information only to improve workplace safety and health, and that no worker will experience retaliation for bringing such information to management’s attention.
- Empower all workers to initiate or request a temporary suspension or shutdown of any work activity or operation they believe to be unsafe.
- Involve workers in finding solutions to reported issues.

Action item 3: Give workers access to safety and health information. Sharing relevant safety and health information with workers fosters trust and helps organizations make more informed safety and health decisions.
- Give workers the information they need to understand safety and health hazards and control measures in the workplace. Some OSHA standards require employers to make specific types of information available to workers, such as Safety Data Sheets (SDSs); injury and illness data (may need to be redacted and aggregated to eliminate personal identifiers); and results of environmental exposure monitoring conducted in the workplace (prevent disclosure of sensitive and personal information as required).
- Other useful information for workers to review can include: workplace job hazard analyses; chemical and equipment manufacturer safety recommendations; workplace inspection reports; and incident investigation reports (prevent disclosure of sensitive and personal information as required).

Action item 4: Involve workers in all aspects of the program. Including worker input at every step of program design and implementation improves your ability to identify the presence and causes of workplace hazards, creates a sense of program ownership among workers, enhances their understanding of how the program works, and helps sustain the program over time.
- Provide frequent and regular feedback to show employees that their safety and health concerns are being heard and addressed.
- Authorize sufficient time and resources to facilitate worker participation; for example, hold safety and health meetings during regular working hours.
- Ensure that the program protects workers from being retaliated against for reporting injuries, illnesses, and hazards; participating in the program; or exercising their safety and health rights.
- Ensure that other policies and programs do not discourage worker participation.

Action item 5: Remove barriers to participation. To participate meaningfully in the program, workers must feel that their input is welcome, their voices will be heard, and they can access reporting mechanisms. Participation will be suppressed if language, education, or skill levels in the workplace are not considered, or if workers fear retaliation or discrimination for speaking up (for example, if investigations focus on blaming individuals rather than the underlying conditions that led to the incident, or if reporting an incident or concern could jeopardize the award of incentive-based prizes, rewards, or bonuses). To accomplish this:
- Ensure that workers from all levels of the organization can participate regardless of their skill level, education, or language.
- Provide frequent and regular feedback to show employees that their safety and health concerns are being heard and addressed.
- Authorize sufficient time and resources to facilitate worker participation; for example, hold safety and health meetings during regular working hours.
- Ensure that the program protects workers from being retaliated against for reporting injuries, illnesses, and hazards; participating in the program; or exercising their safety and health rights.
- Ensure that other policies and programs do not discourage worker participation.

Provide opportunities for workers to participate in all aspects of the program, including but not limited to helping: develop the program and set goals; report hazards and develop solutions that improve safety and health; analyze hazards in each step of routine and nonroutine jobs, tasks, and processes; define and document safe work practices; conduct site inspections; develop and revise safety procedures; participate in incident and close call/near miss investigations; train current coworkers and new hires; develop, implement, and evaluate training programs; evaluate program performance and identify ways to improve it; and take part in exposure monitoring and medical surveillance associated with health hazards.

In the next issue, we will discuss Hazard Identification and Assessment.

About the Author
Ted Beville is Executive Director of the SAIA. Contact him at 816-595-4860, or ted@saiainline.org.
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