

# RAVEN

WINTER 2019 | No. 31





Leib Oehmig  
CEO

What does it mean to be creative? Merriam-Webster defines creative as “having the quality of something created rather than imitated.” If we accept this definition — and to be sure there are others — then why is it important to be creative in the first place? This issue of Raven explores why we create, the implications of doing so and, perhaps most importantly, the ramifications of not harnessing creativity to move business operations forward.

One way companies encourage their associates to create is through the workspace itself. Earlier this year, Glen Raven opened Sunbrella HQ, a space to foster innovation and collaboration with customers and partners from around the world, as the new global headquarters for Sunbrella®. Located inside the renovated plant built by Glen Raven in 1901, the new interiors of the 19th-century building blend the storied textile history of the company with modern architecture to provide an inspiring place to create. If you have not yet visited, I encourage you do so and see for yourself how the workplace can foster new ideas and turn them into new opportunities.

New ideas come standard at Atlanta Bed Swings, a family-owned business founded after a devastating house fire left the Tice family in search of a way to start over. From the ashes of that fire came an idea to reimagine the iconic American home feature — the front porch. Today, the company’s growth trajectory shows no signs of abating, to the point that it has opened a “smart showroom.” You won’t want to miss how it works.

For nearly four decades, West Coast Canvas has built a business in California’s Central Valley to ensure the boating experience is hassle-free.

Company owner Curt Page firmly believes that businesses must continuously create in order to remain relevant, and that is certainly the case with West Coast. Read on to see how “West Coast Canvas 2.0” came to fruition and how Glen Raven helped Page find his footing after a near-disastrous business setback.

Trinity3 Technology, a technology hardware reseller, sends its national sales team to 125 events a year. To manage all the moving parts and people of trade shows and events, the company turned to software development company Switch Four™, a subsidiary of Glen Raven that focuses on mobile and web-based enterprise software. The result? WorkTrip®, a desktop software and mobile app that consolidates and organizes everything needed for planning and attending an event all in one place. Take a read and you might find yourself in search of the app.

Finally, we report from India, one of the world’s fastest-growing economies, to learn how Strata Geosystems is building critical infrastructure around the world. A joint venture with Glen Raven, Strata’s remarkable story is driven by a quest to find creative solutions for some of the most complex engineering challenges in the world. You might be surprised to learn that Strata’s approach to problem-solving is applicable to any industry.

How do you create? What motivates you to improve your craft and inspire others? Only you can answer these questions, though Glen Raven stands ready to help you turn your ideas into reality.



Atlanta Bed Swings, known for bringing Southern charm and new technology to custom outdoor furniture, developed and implemented a “smart showroom” to reach customers in an neighboring state, and a key selling point is the company’s use of Sunbrella® fabrics. | Page 06

# RAVEN

WINTER 2019 | No. 31

02

SUNBRELLA HQ: HOME AWAY FROM HOME FOR CUSTOMERS

10

WEST COAST CANVAS RISES FROM THE ASHES, REFOCUSSES ON ITS ROOTS

16

STRATA ACCELERATES GLOBAL INTEGRATION

06

ATLANTA BED SWINGS BRINGS SOUTHERN CHARM, NEW TECH TO CUSTOM OUTDOOR FURNITURE

14

WORKTRIP STREAMLINES EVENT PLANNING FOR TRINITY3 TECHNOLOGY

## ON THE COVER:

SUNBRELLA HQ, THE NEW GLOBAL HEADQUARTERS FOR ONE OF GLEN RAVEN’S MOST IMPORTANT BRANDS, FOSTERS INNOVATION AND COLLABORATION WITH CUSTOMERS AND PARTNERS FROM AROUND THE WORLD.











# SUNBRELLA HQ

## HOME AWAY FROM HOME FOR CUSTOMERS

Sunbrella® has come home: Sunbrella HQ, a space to foster innovation and collaboration with customers and partners from around the world, is the brand's new global headquarters located inside the renovated plant that Glen Raven built 119 years ago and famously wove the first yard of Sunbrella fabric in in 1961.

The new interiors of the 19th-century building blend the storied textile history of Glen Raven and its founders, the Gant family, with modern architecture, designed by New York City-based TsAO & McKOWN, to provide Sunbrella's passionate employees and business partners with an inspiring place to create.

"We needed more space, but even more importantly, we needed a place for Sunbrella to call home," said Allen Gant, III, director of Outdoor Market for Glen Raven Custom Fabrics and great-grandson of Glen Raven's founder. "It was a great time in the Sunbrella growth life cycle to provide the brand with

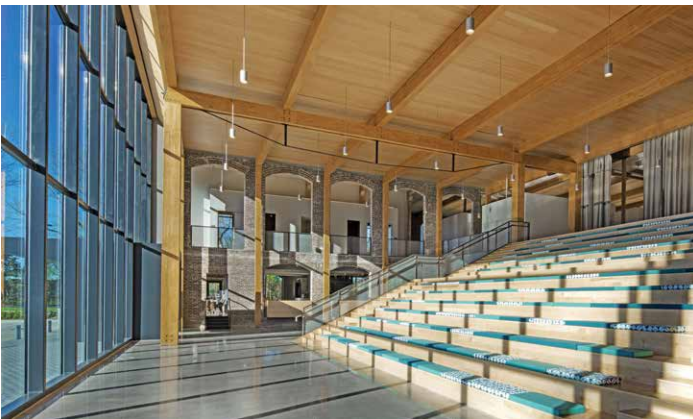
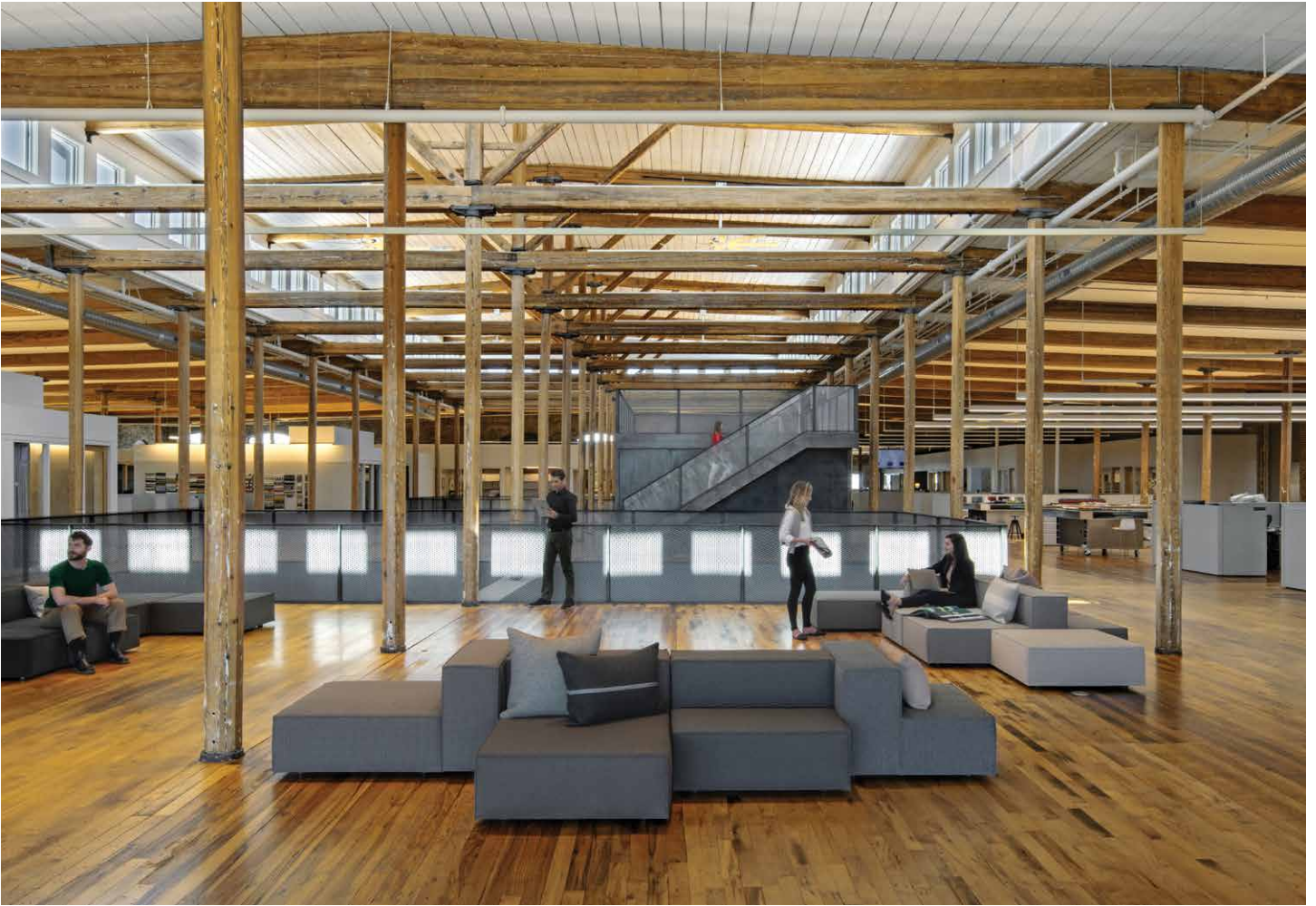
its own space, and there was no better place to call home than its birthplace."

The original 1901 building was the first production facility wholly owned and built by Glen Raven. Over the years, spinning, weaving and finishing moved to newer state-of-the-art Glen Raven facilities, positioning the original space for future possibilities. Growth continued, and by late 2014, company leadership began to envision what was next for Sunbrella's corporate office space.

Allen E. Gant, Jr., chairman of the board and grandson of the company's founder, and CEO Leib Oehmig, who became CEO when Gant, Jr., retired from executive leadership, decided in 2017 to stay on the current campus and celebrate the history and legacy of the brand. The idea for a new global headquarters for Sunbrella was born.

"This building sets a new standard for the space and entrepreneurship that is









“

THIS ISN'T JUST A BRICK BUILDING; IT'S WHERE IT ALL STARTED. AND NOW IT'S A PLACE TO CREATE.”

LEIB OEHMIG  
CEO

needed to be effective in tomorrow's workplace,” said Gant, Jr. “The world is constantly changing, and if a company does not have the capacity to change along with it, it won't be successful in the future. We must have the ability to innovate. This building encourages us to do that.”

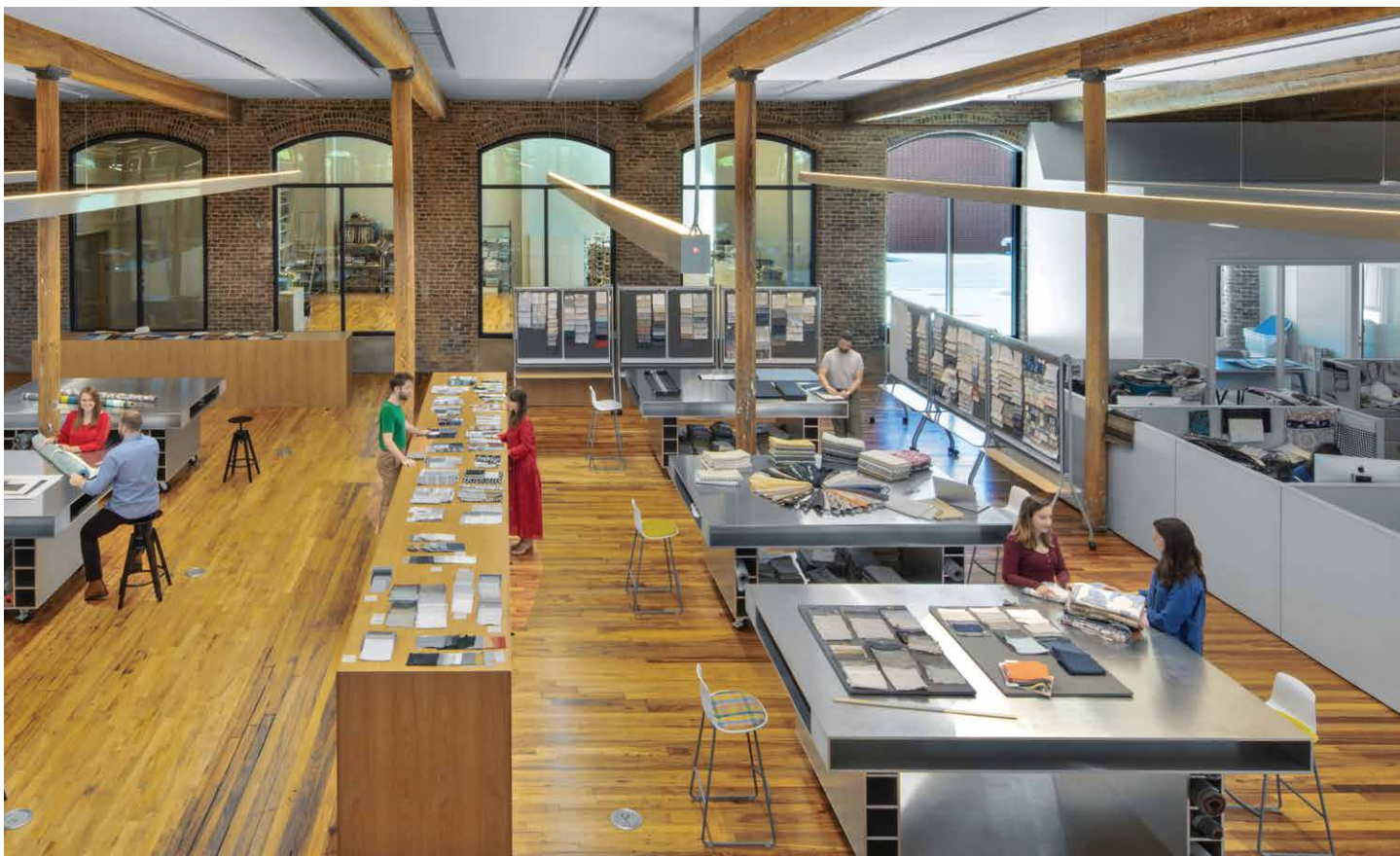
In the finished space, the brand's history is reflected in architectural details, such as 119-year-old pinewood floor planks embedded with metal ring travelers dating back to the early years of production, exposed structural beams and original brickwork. Juxtaposed with these historical elements are more modern features, including a glass wall that floods the front of the building with natural light, an on-site coffee shop and a vertical garden that extends between the building's two floors. Sunbrella fabrics were incorporated throughout the facility: on upholstered chairs in common seating areas, as roller shades, as dramatic custom drapery at the top of the grand staircase and on the chairs in the coffee shop.

“Our modern workspace will drive the Sunbrella brand into the future with a design intended to spur creativity in employees,

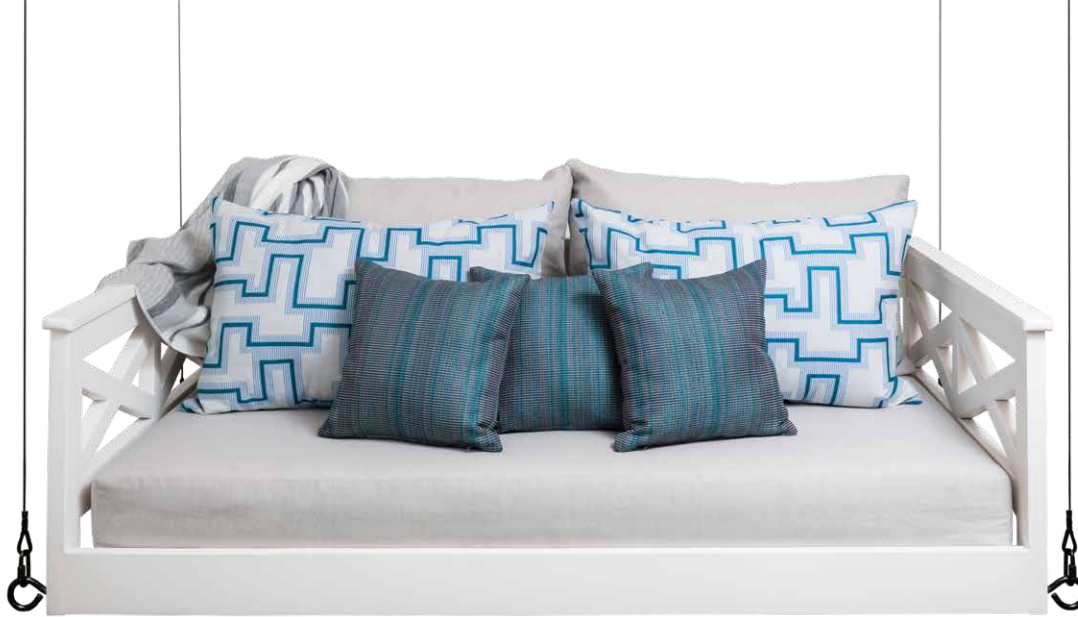
customers and visitors alike,” Oehmig said. “The completed project captures our history through the building's patina and our future through the thoughtful placement of Sunbrella textiles. This isn't just a brick building; it's where it all started. And now it's a place to create.”

Looking to the future, Sunbrella HQ will continue to house Sunbrella's best asset — its people. The bright minds of every discipline will be energized and inspired by the building's storied history and will continue to honor the brand's legacy and ongoing commitment to being one of the leading performance brands on the market and the trusted choice around the world for years to come.

“It is nothing short of amazing to walk among the design, creative and marketing teams at Sunbrella HQ and see them working side by side with our customers,” Oehmig said. “This building is truly a home away from home for our customers and represents the next generation of productivity, collaboration and inspiration that sets a path for Glen Raven's and our customers' future.”







# ATLANTA BED SWINGS

BRINGS SOUTHERN CHARM, NEW TECH  
TO CUSTOM OUTDOOR FURNITURE

Around Christmas 2012, a house fire destroyed 90% of Mike and Erin Tice's home and belongings. Uninsured, the couple, along with their five children, had to start over. They purchased some undeveloped land in the Florida Panhandle and moved onto the property in a double-wide mobile home. From there, the family developed and jump-started their now-thriving business, Atlanta Bed Swings.

"Our story comes out of the trauma of the fire," Erin said. "And it continues to motivate us. Before Atlanta Bed Swings, Mike was doing some remodeling and making all kinds of furniture, but we found a great opportunity in the market by taking an innovative approach to this part of Southern culture in bed swings."

Across human history around the world, people have designed dwellings with outdoor features, such as the courtyard

or terrace, for communal gatherings, business meetings and natural airflow to escape the summer heat. The porch, while it shares the same functionality, is considered a uniquely American home feature. Porch bed swings — deep-set, cushioned swings that hang under a covered porch — have been around since the late 19th and early 20th century when "sleeping porches" provided fresh air for health and respite from the stagnant summer heat.

"It's not exactly an original idea, but we brought it back with a new spin," Mike said. "It's seen as a luxury item for residences now."

Mike has always worked for himself, and for years, he made a variety of indoor and outdoor furniture. Through his furniture business, he was hired to make bed swings for a designer at a beach in Florida years ago. Initially, he says he didn't particularly









“

IT'S NOT EXACTLY AN ORIGINAL  
IDEA, BUT WE BROUGHT IT  
BACK WITH A NEW SPIN.”

**MIKE TICE**

Owner, Atlanta Bed Swings

care for the bed swing projects. But through his natural drive to improve and perfect his craft, he developed a specialized skill set. He saw the demand for bed swings from home consumers begin to grow while he was still offering a catchall of home furnishings. They rebranded the business to be exclusively about bed swings in 2015. In 2017, they began their business relationship with Sunbrella® fabrics through Glen Raven's distribution subsidiary, Trivantage®.

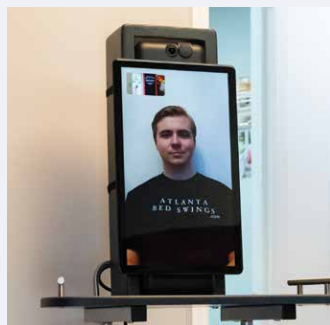
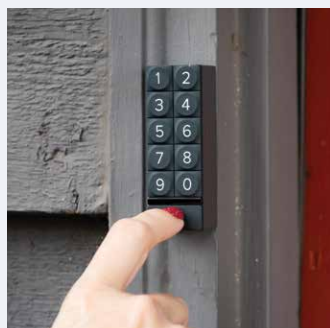
The family works as a team to construct the swings, from sewing the covers to assembling the pillow cushions. Inspired by the five-year warranty offered by Sunbrella, they sought to give their finished product a five-year warranty overall. This meant obtaining the best products, including high-quality paint, wood species and Trivantage-sourced inserts, for added longevity.

The Tice's eldest son, Tyler, was young at the time of the fire, but Erin says he has always been mature, goal-oriented

and motivated for his age. Tyler saw the potential increase in opportunity available to companies with a digital presence and taught himself how to build a website for the business. Articulate and shrewd, he started assisting his father with business communications and sales, both at markets and online. His position has evolved and developed over time, and now at 18, he officially leads the sales and marketing efforts for the company while pursuing his undergraduate degree in business. His natural talent for business and the industry was evident early on. Erin says larger corporate companies were offering him sales jobs after talking and emailing with him about their products, not realizing he was still a minor.

A family business to the core, their second eldest son, Michael, 17, works on the bed swings and in the frame shop as well. Jacob, 15, enjoys learning about the industrial machinery and takes on tasks such as switching out the sewing needles. The two youngest children, another son and





a daughter, are less involved at this point, but still take on more age-appropriate duties, such as “pillow day,” where the family will assemble many pillows at once.

Mike and Erin emphasize that, while the kids don’t have to work for the family business, it was always anticipated they would work somewhere when they’re old enough. It is important to them as parents to teach the children what a good work ethic is.

Mike says that, in addition to rebuilding their life after the fire, owning his own business has been motivating for him. It also contributes to his passion for American-made products, and he makes a point to source everything from the Sunbrella fabric to hardware from American facilities. American-made has worked well for their business so far: Tyler says their data shows that, after switching to Sunbrella fabric two years ago, they’ve grown exponentially — around 50% each year, compared with 35% growth with their previous fabric supplier.

As the company continues to grow, the family is increasingly focused on the future. Although the family is based in Florida, they have a large customer base in the Atlanta metro. Faced with the growing pains of increased travel demands, Tyler and Mike developed and implemented an idea for a “smart showroom” in 2019. The key feature? No one has to physically be there.

“People are used to shopping without a salesperson present now,” Tyler said,

regarding increased online shopping habits. “But for a large, luxury item like a bed swing, they want to see it and feel it in person before they make the financial commitment.”

With the smart showroom, customers can arrange an appointment at any time of the day. Tyler sends them a unique keypad code to get into the facility, and it is set to power on the lights when the customer walks in. From there, they encounter a wheeled kiosk with a screen that connects via video chat to one of their reps — Tyler, Mike, Erin or Cindy — wherever they may be. They then walk with the kiosk through three different bed swing scene displays where they can test out the product and evaluate color and texture in real life. The final stage of the showroom is a video conference room complete with snacks and drinks to make the experience comfortable and pleasant while they chat through the details. With instructions on how to lockup, the showroom is then set to power down once the customers leave.

“We’re planning to use this concept to expand outside of Atlanta,” Tyler said. “So far, the feedback has been really positive. We’re guessing what’s next, and this showroom concept provides an efficient way to present our products with the best experience possible.”

On the web at [atlantabedswings.com](http://atlantabedswings.com)





A photograph of a destroyed industrial site. In the foreground, a large, dark, rusted metal chest or safe stands amidst a pile of debris. The chest has several drawers and is surrounded by twisted metal, charred wood, and other wreckage. In the background, a large, white, cylindrical object, possibly a barrel or a piece of machinery, is visible, partially covered in ash and debris. The overall scene is one of destruction and decay, with a dark, somber color palette.

# WEST COAST CANVAS

RISES FROM THE ASHES, REFOCUSSES ON ITS ROOTS





When Curt Page was in high school, he got a job with the father of a friend of his who owned a local marine canvas shop near the Sacramento River delta. After graduation, he went to work full time in the shop and was quickly promoted to shop manager across its three locations. It was there that a Sunbrella® sales representative, outfitted in a Pacific Blue Sunbrella fabric suit, introduced himself. Nearly 40 years later, Page still works in the marine canvas industry and maintains a close partnership with Trivantage®. While he's worked in the same industry and region for decades, it's his aptitude for flexibility, eye for opportunity and embrace of continuous innovation that have made him successful, even in the face of major challenges, throughout his storied career.

"I'm 57 years old now, and this is really the only job I've ever had," Page said. "Over the years, the Trivantage team has always been there for me."

An entrepreneur from an early age, Page struck out on his own and formed

“ A DAY DOESN'T GO BY THAT I DON'T REMEMBER THREE MORE THINGS I FORGOT ABOUT THAT BURNED UP, BUT THE POSITIVE RESPONSE I'M HEARING SO FAR IS FANTASTIC. SURE, MY RETIREMENT AND EXIT STRATEGY HAVE CHANGED, BUT I'M LUCKY TO BE HEALTHY, STRONG AND REALLY ENJOY WHAT I DO.”

**CURT PAGE**  
Owner, West Coast Canvas



West Coast Canvas when he was just 19. Although young, he already had years of experience from working in his friend's family business. Over the next 38 years, West Coast Canvas grew steadily. While his specialty had been solely canvas and upholstery, after the 2008 recession, Page saw a profitable new market in yachts and expanded from canvas to include marine electronics, cabinetry and woodworking. He took a calculated risk in expanding the



business to include those products and services. The risk paid off. Page is now well known in the yacht business and has developed a strong network of marine professionals and yacht owners in the region.

Last year, the company was at a point where he could take a real vacation. He and his wife went on a three-week road trip in the fall of 2018. As they entered 2019, he had 22 full-time employees, including a general manager Page was training to take over and run the business one day. However, positive cash flows and the best planning can't make up for random bad luck.

"At the end of January and early February, I was out of town for a long weekend," Page said. "Tuesday night, I got phone call saying my business was on fire. The entire building was engulfed."

The building, a warehouse built over the river in a remote, rural location at a marina, had every right condition for a catastrophic fire. The wood structure stored a multitude

of flammable, combustible materials. Its remote location led to a late report of the fire and then it took emergency responders a relatively long time to get there.

"We lost everything," Page said. "I didn't get a screwdriver out of there."

The inspectors couldn't say for sure, but it's thought the cause of the fire was electrical. While insurance did cover the incident, Page hadn't updated his insurance to adequately reflect the growth of the business.

"I was grossly underinsured and didn't realize it," Page said. "That's on me. I've had the same insurance broker for 38 years, and we increased a few times of course, but it wasn't on pace with our numbers."

Ultimately, insurance agreed to cover \$250,000 for damaged contents. Unfortunately, after accounting for all the equipment and material that builds up over a 38-year career, he estimates the loss was more than \$1 million.

“

SOME OF MY  
EMPLOYEES HAVE  
BEEN WITH ME FOR  
OVER 20 YEARS,  
WHICH SAYS A LOT  
ABOUT A COMPANY.  
THEY ALL HELPED  
REBUILD WEST COAST  
CANVAS 2.0.”

**CURT PAGE**  
Owner, West Coast Canvas







There are superstitious people who believe misfortune comes in groups of threes, and it seems to ring true for Page. Three weeks after the fire, Page fell and shattered his right wrist. They were working around the clock to build the new shop as quickly as possible when his GM, overwhelmed by the additional pressure and responsibility, realized he no longer wanted to run the business and quit. But Page and the remaining West Coast Canvas team was ready to be nimble and creative to get the new business up and running as quickly as possible.

"We're recovering through it all," Page said. "Some of my employees have been with me for over 20 years, which says a lot about a company. They all helped rebuild West Coast Canvas 2.0. I'd say we're operating at about 75% to 80% of where we were before the fire in less than a year."

They found a commercial space they could move into just a couple weeks later. While the new location is at a large boatyard in

Stockton 20 miles away from the marina, the space is newer and even more convenient for some of his longtime customers. Page estimates nine out of 10 of their customers stayed with them in the new location.

Because the insurance money was so little, Page knew they couldn't go back to immediately offering every service they did before the fire. He decided to start back first with his longtime specialty: canvas and upholstery.

"We're refocusing on the target business," Page said. "We're back to our roots in canvas and fabrication for boat tops, covers and upholstery."

They had to order new everything: sewing machines, upholstery tools and all the materials. However, Page has always maintained a close relationship with Trivantage, Glen Raven's distribution subsidiary, and his rep was able to offer him a package to help restore his shop after the fire.

"He reached out after the disaster," Page said. "They sent me 360 yards of Sunbrella to help get the business going again, and I know that gesture will pay in dividends over the rest of my career."

While he says he would trade it back for his old warehouse in a second, the new location has had unanticipated positive results. For example, there's an increased flow of potential new customers. While they used to be remote and only see people who were there intentionally, the new location attracts walk-ins with curiosity piqued by the sign.

"A day doesn't go by that I don't remember three more things I forgot about that burned up," Page said. "But the positive response I'm hearing so far is fantastic. Sure, my retirement and exit strategy have changed, but I'm lucky to be healthy, strong and really enjoy what I do."

On the web at [westcoastcanvas.com](http://westcoastcanvas.com)





# WORKTRIP

STREAMLINES EVENT PLANNING FOR  
TRINITY3 TECHNOLOGY



After spending nearly a decade managing events for Glen Raven, Inc., Heather Haigler knew there had to be a better way to communicate and stay organized through the whirlwind of corporate trade shows and events the company participates in every year. But rather than piecing together various project management software programs, chat platforms and long email chains — effectively applying a bandage — she sought a more global solution. That's why, in 2016, she and co-founder Nathan Aaron formed Switch Four™, a subsidiary of Glen Raven, and started to develop WorkTrip®.

WorkTrip is a desktop software and mobile app that consolidates and organizes everything needed for planning and attending an event all in one place. From travel details and itineraries to registration documents and dinner reservations, the team can seamlessly store information and communicate with one another in preparation for and during the event. The solution is currently deployed across Glen Raven and has gained additional customers outside of the company as well.

"For Glen Raven travelers, all of the event schedules and documents are all together in one place, so they have everything at their fingertips," Haigler said. "They no longer have to search through countless emails to find this important event information."

In St. Paul, Minnesota, technology hardware reseller Trinity3 Technology saw the value of the WorkTrip app right away. The business sells a variety of new and refurbished laptops and tablets specifically for the education market. Trinity3 Technology adds value to the hardware through its warranty program, offering up to five years of damage protection to cover the range of harms potentially facing hardware in the hands of students, including drops, spills, malicious viruses and more.

With a vast target market — there are more than 130,000 K–12 schools in the U.S. — Trinity3 Technology makes a point to cover a lot of ground with their national sales team.



“

DEVELOPING A BUSINESS  
SOFTWARE DIVISION HELPS  
DIVERSIFY GLEN RAVEN AND  
SHOWS A COMMITMENT  
TO INNOVATION THAT WILL  
HELP IT CONTINUE TO BE  
SUCCESSFUL INTO THE  
NEXT CENTURY.”

**NATHAN AARON**  
Co-founder, Switch Four



"Our reps attend around 125 events every year, and we're looking at adding potentially 10 to 20 more next year," said Keri Hamel, Trinity3 Technology's senior marketing and trade show coordinator. She added that the company is expanding from K-12 to include higher education institutions, which will offer the team more event opportunities. "The majority, probably 90 to 100, are strictly trade shows. The other 25 are smaller events such as lunch and learns."

Hamel said she learned to manage all the moving parts and people of a trade show by compiling service kits, binders of more than 50 printed pages including the location, show schedule, lead retrieval, travel information such as hotels, flights and rental cars, booth registration and records of items rented for the booth such as the carpet, tables, chairs and electricity. The event team would compile and provide the service kit to the corresponding rep before each show. On top of the printed documentation, which, Hamel said, reps often forgot to take with them, they had the additional effort of keeping people in different locations organized in real time through email. The task grew more difficult as they expanded their show reach. For example, the same marketing information couldn't serve the higher education market and K-12.

At EXHIBITORLIVE, the trade show for people who work in trade shows, Hamel saw the WorkTrip booth and approached it. When she discovered it could actually digitally compile all of her service kit documentation, maintain separate teams for each event and send real-time updates to the team on the ground, Hamel knew it was a solution they needed.



"It was like a lightbulb went off," Hamel said regarding her introduction to WorkTrip at the trade show. "The app allows me to get rid of all this printed paper, plan ahead more and make all the information readily available to the team. If a sales rep asks me where they're going next, whether it's where dinner is tonight or where the trade show is in two weeks, I can just tell them it's already in the WorkTrip app on their phone."

The anecdotal data proves this new approach increases efficiencies. Haigler said both outside customers such as Trinity3 Technology and internal Glen Raven event planners report that they are now getting event registrations, travel itineraries and other documents faster than before by using WorkTrip. As an added bonus, the information in WorkTrip can automatically sync and integrate with other business software products, such as Concur and rideshare apps.

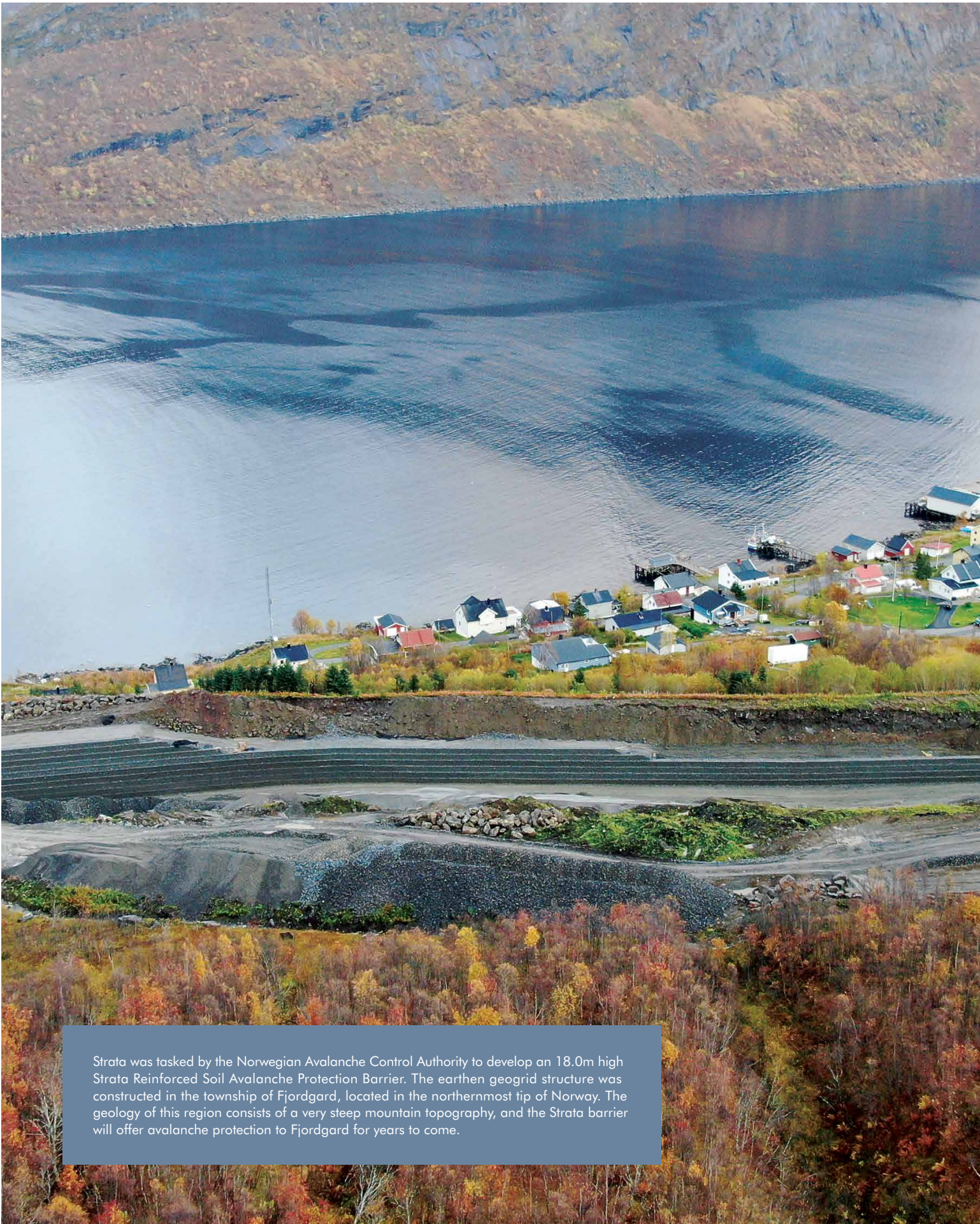
Because Haigler has been in the event management trenches, WorkTrip is able to offer features specific and convenient to the trade show and corporate events world that other business software products may not think to offer. For example, planners can send push notifications to the phones of attendees if there is a restaurant change for dinner or they need more representatives at the booth. Ultimately, supporting and adopting new technology and more efficient business practices is what will keep Glen Raven strong now and into the future.

"Developing a business software division helps diversify Glen Raven and shows a commitment to innovation that will help it continue to be successful into the next century," Aaron said. "We aim to carry the mission of Glen Raven by providing world-class software products and customer service."

On the web at [trinity3.com](http://trinity3.com) and [worktrip.com](http://worktrip.com).







Strata was tasked by the Norwegian Avalanche Control Authority to develop an 18.0m high Strata Reinforced Soil Avalanche Protection Barrier. The earthen geogrid structure was constructed in the township of Fjordgard, located in the northernmost tip of Norway. The geology of this region consists of a very steep mountain topography, and the Strata barrier will offer avalanche protection to Fjordgard for years to come.





# STRATA

## ACCELERATES GLOBAL INTEGRATION

In 2004, Glen Raven, Inc., founded a joint venture with its geosynthetics business, Strata Systems, based in the U.S., and a manufacturer and distributor of soil reinforcement products in India under the name Strata Geosystems. What began as a sales office in India has transformed into a world-class geosynthetic products manufacturer and engineering and construction services provider. The joining of these two companies has since far expanded the reach of the U.S. and India, known for its engineering expertise and quality products, becoming a leading geotechnical resource.

Today, Strata's broadening global footprint and the reach of its geosynthetic products has led to the formation of a unified Strata brand, with global headquarters in India and a U.S. location, which serves as the North American marketing arm. The result is one global Strata, one global mission and a relentless focus on solutions for customers.

"Unifying the Strata brand reflects the continued integration of our dual-hemispheric business approach, and it supports the growing scope of our combined global footprint," said Narendra Dalmia, Director/CEO of Strata. "Not only does it embody the efforts we have made to become more efficient in our manufacturing, marketing and supply chain operations, but it also signifies a singular brand promise for the global enterprise and improves our messaging within the global marketplace."

Ashok Bhawnani, Director of Strata, echoed Dalmia's message that a focus on one global Strata means even more advanced geotechnical solutions for customers.





The Road Infrastructure Agency in Bulgaria turned to Strata for technical construction support for the Hemus A2 Expressway, which stretches from the mountains to the sea in the southeast Europe country.



"We view India as the hub of the global Strata enterprise," he said. "Our vast resources in India, including personnel, engineering expertise and manufacturing capabilities, are an engine for global growth, and they enable the North American operation to further enhance their product, technical and customer service offerings as well."

India, one of the world's fastest-growing economies, and the U.S., known the world over as an incubator for innovative technical solutions, are ideally suited to serve as the host countries for Strata's operational structure and focus on solutions for global customers, said Craig Bell, general manager of Strata.

"Strata has traditionally been recognized as a regional geogrid company within its core markets, the U.S. and India, but in recent years, our outlook and scope have become far more global," Bell said. "We have introduced new products, evolved our business model to accommodate turnkey solutions for large projects and developed a sizable construction division for building walls across the highway and landfill sectors, among others."

Strata's objective is to make the company the world leader in providing reinforcement solutions for weak soils, walls, slopes and other applications across the globe. In the U.S., Strata is a dominant geogrid supplier in the commercial and residential market with major growth opportunities in the infrastructure development, such as highways, landfills and the energy sector. In India, Strata is the dominant player in the highway market, working on the largest projects on a turnkey model.

"Strata must continue to diversify to promote and develop technology in the private sector, such as commercial and residential projects, and the environmental sector, including landfills, mining and energy," Bell said. "Our approach to diversification is already resulting in the new growth opportunities outside of India and the U.S., including the U.K., New Zealand, Brazil, Egypt and Spain."

In New Zealand, for example, Strata was tasked by the North Canterbury Transport Infrastructure Recovery alliance with repairing a vertical retaining wall along State Highway 1, which is the longest road

in the island country. The highway was damaged in November 2016 following a 7.8 magnitude earthquake that struck near the coastal town of Kaikōura. Strata provided the preliminary design, system supply and technical construction support for the 4,000-meter-long retaining wall. The structure was designed for the possible next major earthquake event and consisted of proprietary designed reinforced precast concrete blocks and StrataGrid Geogrids.

"State Highway 1 connects the two islands that make up New Zealand, so its significance to commerce and mobility cannot be overstated," Bell said. "This project exemplifies the range of solutions offered by Strata that are designed to stand the test of time."

Another significant infrastructure project that required ingenuity and unique problem-solving skills is the Hemus A2 Expressway in Bulgaria. The expressway stretches nearly the length of the southeast Europe country, from the capital city of Sofia to the port city of Varna. Strata provided the Road Infrastructure Agency, which manages highway projects in the country, with preliminary design, system supply and technical construction support for four reinforced highway embankment walls/slopes to reduce the embankment footprint and expedite construction.

"This project stands to boost the long-term economic health of Bulgaria, in part because it better connects mountainous and inland regions of the country with the largest port on the Bulgarian Black Sea Coast," Bell said. "We are quite proud to have played a role in the development of such an important infrastructure project."

“

STRATA HAS  
TRADITIONALLY BEEN  
RECOGNIZED AS A REGIONAL  
GEOGRID COMPANY WITHIN  
ITS CORE MARKETS, THE U.S.  
AND INDIA, BUT IN RECENT  
YEARS, OUR OUTLOOK AND  
SCOPE HAVE BECOME FAR  
MORE GLOBAL.”

**CRAIG BELL**  
General Manager, Strata

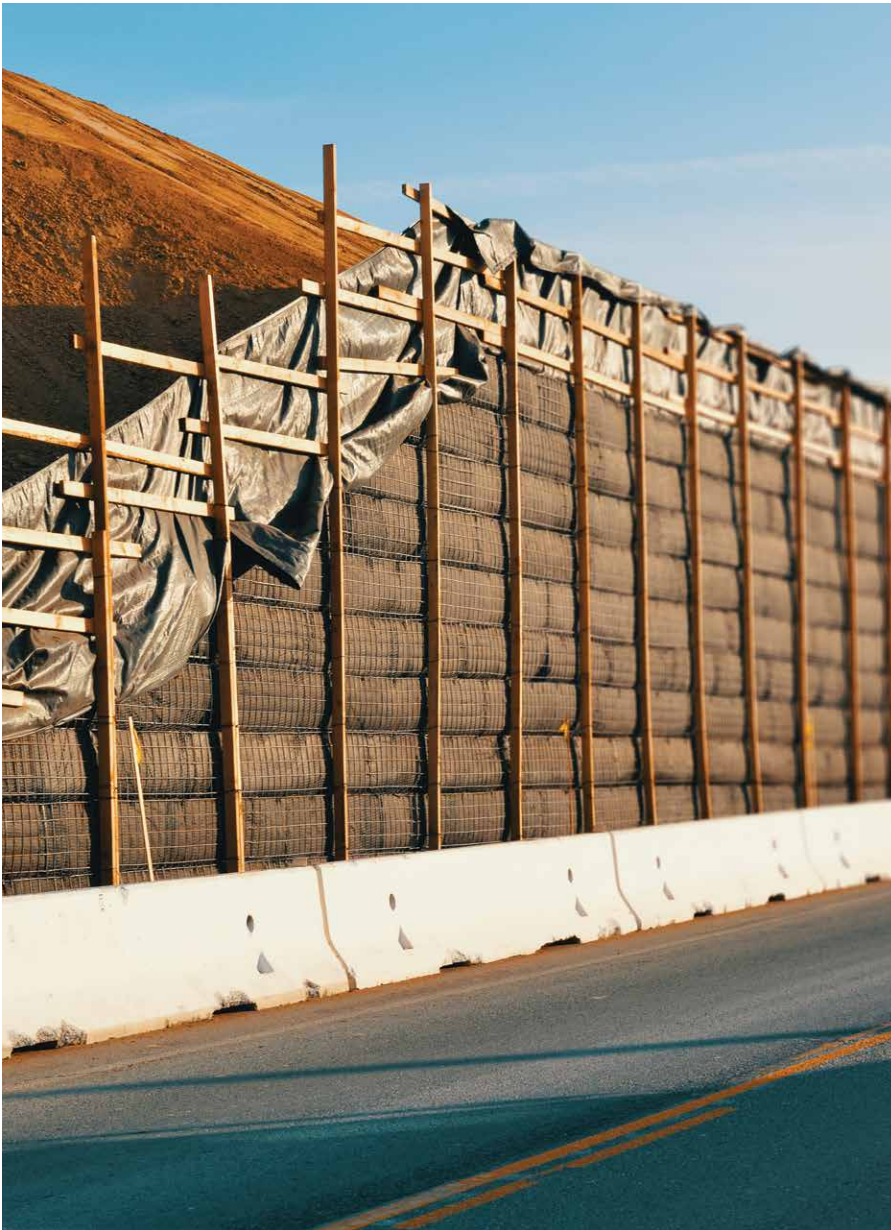
Strata repaired a vertical retaining wall along State Highway 1, which is the longest road in New Zealand, after a devastating earthquake struck the island country in 2016.







Narendra Dalmia (left), Director/CEO, and Ashok Bhawnani, Director, lead Strata's business operations in India.



Narendra Dalmia and Ashok Bhawnani have led Strata business operations in India since its founding in 2004 as a joint venture with Glen Raven, Inc. In a recent interview, both executives were bullish about both Strata's short- and long-term global growth opportunities under a "one Strata" banner, and they also discussed how Strata is poised to become the largest reinforcement solution provider globally.

#### WHAT DO YOU CONSIDER STRATA'S GREATEST STRENGTHS?

**DALMIA:** It is difficult to pinpoint one specific factor, but some of the major points include our diversity, varying business models across markets, ability to learn from these different models, being nimble enough to implement changes while at the same time operating with the highest degree of professionalism, and unwavering commitment to quality and safety. Over the years, we have chosen to pursue the less trodden path (we started out as a manufacturer but are currently the largest wall building company in India) that has allowed us to weather all storms.

#### WHAT ARE YOUR BUSINESS PRIORITIES?

**BHAWNANI:** Our new Daheli plant has been a big leap in our capabilities not only from a capacity perspective but also from bringing out the best quality geogrid with advanced technical performance in the market. With the new state-of-the-art machines, we can expand our product portfolio to offer higher-strength geogrids, biaxial geogrids and composite geogrids, all with enhanced technical properties. In the near-term, maximizing our capacity and developing markets for these newer geogrids, which we could not offer before, will be our number-one priority. Strata is always looking to grow rapidly, and we will be looking to add more capacity and newer product lines in the longer term.

#### DESCRIBE THE STRATEGIC IMPORTANCE OF THE NEW DAHELI FACILITY IN TERMS OF REACHING GLOBAL MARKETS.

**DALMIA:** I cannot begin to describe the importance of our new facility to the global marketplace. Our older plant, in Daman, was running with older machines and had limitations on the range of products produced. The Daheli plant, with new machines and a new coating line, has



not only expanded our product range and technical performance but also provided a certain finesse required when competing against the top companies in our sector. The packaging, testing, certifications and inventory management have all improved drastically and will provide substantial intangible benefits. The ability to make one of the widest geogrids on the planet will also serve as a key differentiator.

#### WHAT ARE THE MAJOR GEOTECHNICAL CHALLENGES FACING YOUR CUSTOMERS TODAY?

**BHAWNANI:** There is perhaps no greater challenge than the availability of quality aggregate materials, such as soil, stone and sand for construction, which results in the need to on occasion use materials such as ash, slag and high fines soils. Another concern is the uncertainty in environmental factors due to massive climate variability. Every year, there is a record event in some part of the world, and as a result, designs are constantly modified to cater to these changes.

There is also a general lack of awareness of geosynthetics as a solution for geotechnical issues. Our constant mission at Strata is to spread awareness of the use of geosynthetics in construction through various forums, such as preparing the teaching curricula for colleges, writing national codes for use in infrastructure and creating national testing and quality control standards. Our end goal is to take the geosynthetic technology to the doorstep of every civil engineer.

#### WHAT CAN WE EXPECT FROM STRATA IN THE YEARS AHEAD?

**DALMIA:** In a few words, growth, growth and more growth. In the short term, our focus is to maintain a growth trajectory that currently tops 30% and remain one of the top three manufacturers for geogrids in the world. Over the long term, we want to be the largest reinforcement solution provider globally. Strata's future is unlimited, and I can't wait to see where we go next.







## STRATA GEOSYSTEMS BUILDING CRITICAL INFRASTRUCTURE AROUND THE WORLD



Strata Geosystems, a global leader in geotechnical product and engineering solutions, opened a new state-of-the-art manufacturing facility in 2019 in Daheli, Gujarat, to meet the growing demand for geosynthetic products in India and around the globe. A joint venture of Glen Raven, Inc., and headquartered in Mumbai, India, Strata provides solutions to complex soil reinforcement and stabilization challenges.

"The growth and evolution of our Strata teams in India and North America has been nothing short of extraordinary," said Leib Oehmig, CEO of Glen Raven. "We couldn't be more pleased with the current and potential growth trajectory for Strata, and the Daheli facility is central to Strata meeting the demands of its customers on the world stage."



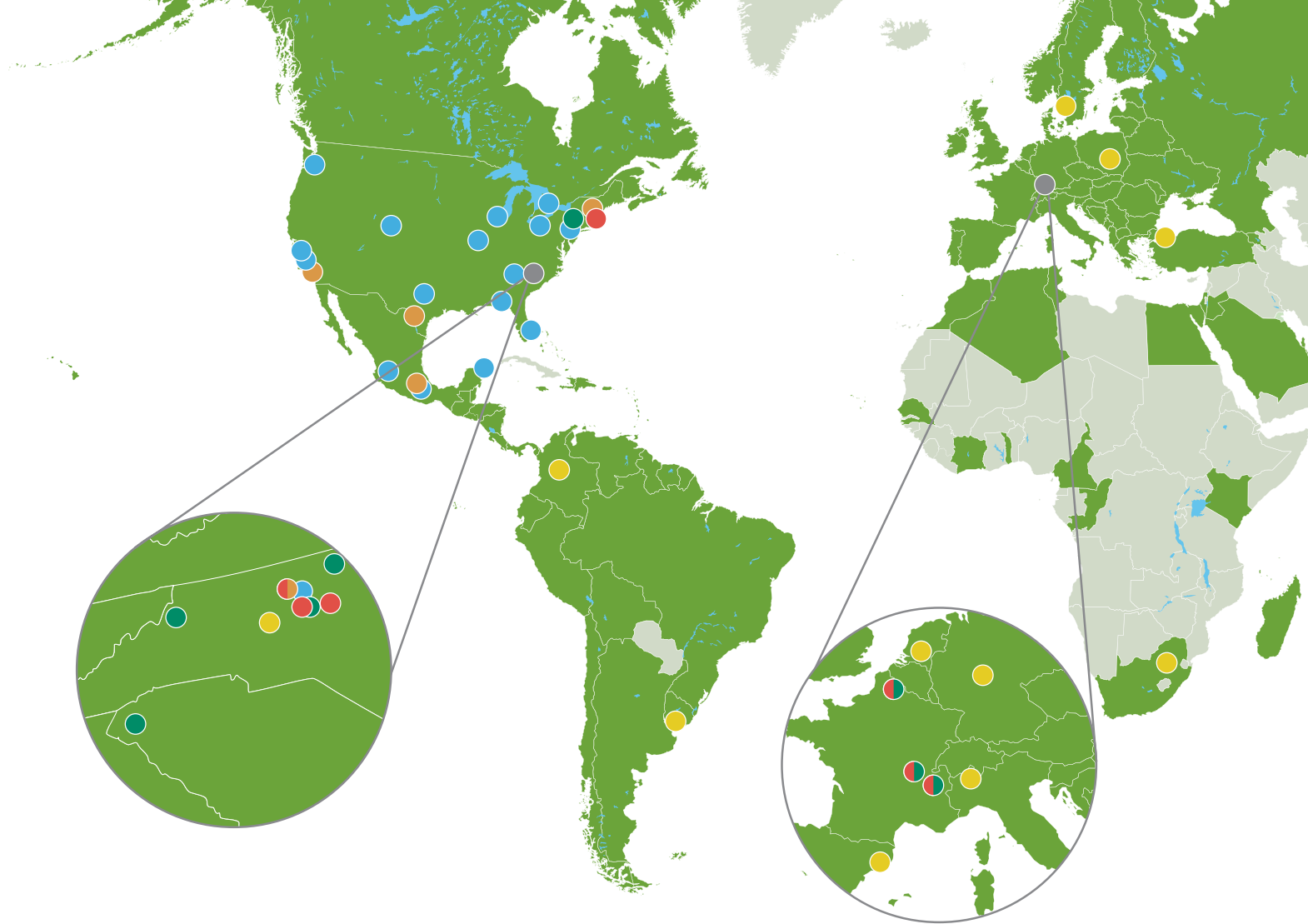
"The opening of the Daheli facility is yet another milestone in Strata's remarkable story," said Harold Hill, president of Glen Raven Technical Fabrics, LLC, a division of Glen Raven. "The global mission of Strata is to create new products for the burgeoning geosynthetic market, and our new facility is designed to do just that."

The joint venture, founded in 2004, began as a manufacturer of geogrids and has since evolved into a fully integrated design, supply and construction firm. Today, Strata is India's largest producer of reinforced soil structures and one of the top three manufacturers for geogrids in the world.

For Glen Raven, a global leader in performance fabric, Strata's success is another example of how it finds creative solutions for its customers that drive value for both Glen Raven and the global textile sector.

"Strata's focus on innovation and technology has resulted in its products being used to build critical infrastructure around the world," said Craig Bell, general manager of Strata. "We push the boundaries of what's possible to solve the toughest engineering challenges and are quite proud to be a part of providing so many solutions that are having such a positive and lasting impact around the world."





# GLEN RAVEN GLOBAL LOCATIONS

## GLEN RAVEN, INC.

- Corporate Office  
Glen Raven, NC  
336.227.6211
- Altamahaw Conference Center  
Altamahaw, NC  
336.227.6211

## GLEN RAVEN ASIA

- Corporate Office/  
Manufacturing Plant  
Jiangsu Province, Suzhou  
86.512.6763.8151
- Sales Office  
Xuhui District, Shanghai  
86.21.5403.8385

## GLEN RAVEN CUSTOM FABRICS, LLC

- Sunbrella HQ  
Glen Raven, NC  
336.227.6211
- Anderson Plant  
Anderson, SC  
864.224.1671
- Burlington Plant  
Glen Raven, NC  
336.227.6211

- Norlina Plant  
Norlina, NC  
252.456.4141

- High Point Showroom  
High Point, NC  
336.886.5720

- Burnsville Plant  
Burnsville, NC  
828.682.2142

- Sunbury Design, Sales &  
Marketing Office  
New York, NY  
212.925.4600

- Sunbury Plant  
Sunbury, PA  
570.286.3800

## GLEN RAVEN TECHNICAL FABRICS

- Corporate Office  
Glen Raven, NC  
336.227.6211
- Shawmut Park Avenue  
Glen Raven, NC  
336.229.5676

## STRATA SYSTEMS, INC.

- Corporate Office  
Glen Raven, NC  
800.680.7750

## STRATA GEOSYSTEMS (INDIA) PVT. LTD.

- Corporate Office  
Mumbai  
91.22.4063.5100
- Daman Plant  
Bhimpore, Daman  
91.260.222.1060
- Hyderabad Sales Office  
Hyderabad  
91.9949.361.706
- Gurgaon Sales Office  
Gurgaon  
91.9871.102.146
- Daheli Plant  
Daheli, Gujarat  
91.992.043.2001

## DICKSON-CONSTANT

- Corporate Office  
Wasquehal, France  
33.(0)3.20.45.59.59
- Dickson-Constant Italia SRL  
Gaglianico, Italy  
39.015.249.63.03
- Dickson-Constant GMBH  
Fulda, Germany  
49.(0)661.380.82.0

- Dickson-Constant Nordiska AB  
Frölunda, Sweden  
46.31.50.00.95

- Dickson-Constant España  
Barcelona, Spain  
34.93.635.42.00

- Dickson-Constant Oddzial W Polsce  
Kielce, Poland  
48.510.080.502

- Dickson-Constant Netherlands  
Breda, Netherlands  
31.65.434.56.24

## DICKSON COATINGS

- Dickson PTL  
Dagneux, France  
33.(0)4.37.85.80.00

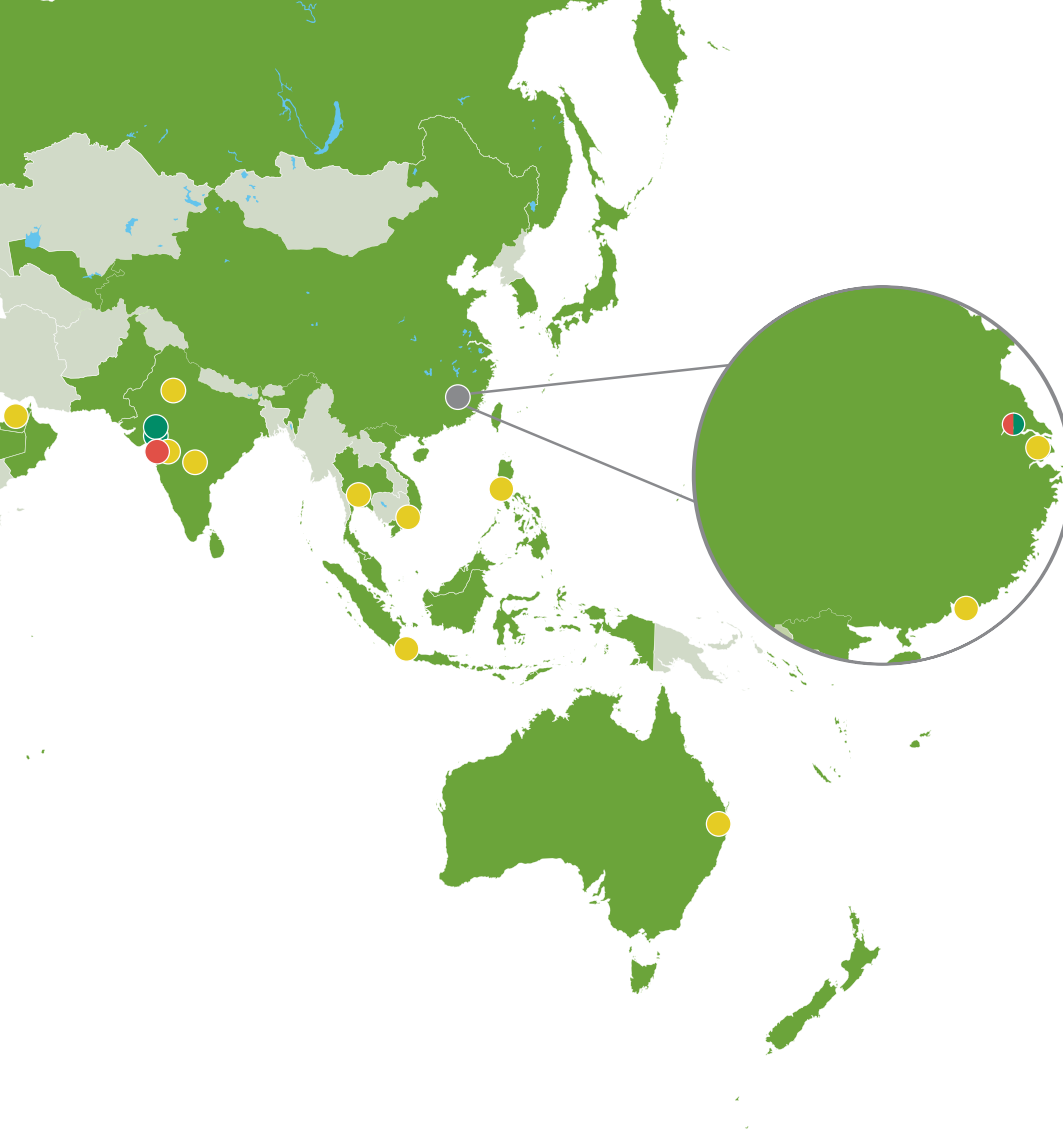
- Dickson Saint Clair  
Saint Clair de la Tour, France  
33.(0)4.74.83.51.00

## SUNBRELLA/DICKSON

- Andean Region / Central America  
Sales Representative  
Bogota, Colombia  
57.310.461.0776
- South America Sales Office  
Montevideo, Uruguay  
59.89.9209.219



Glen Raven, Inc.  
1831 North Park Avenue  
Glen Raven, NC 27217  
336.227.6211  
glenraven.com



- Corporate
- Manufacturing
- Corporate/Manufacturing
- Distribution
- Sales/Service
- Logistics
- Countries Sold Into

● Vietnam Sales Office  
Ho Chi Minh City, Vietnam  
84.906.397.888

● Indonesia Sales Office  
Jakarta, Indonesia  
62.21.5289.7393

● Oceania Sales Representative  
Varsity Lakes, Australia  
61.(0)4.3299.5334

● Sub-Saharan Africa and Indian  
Ocean Sales Representative  
Johannesburg, South Africa  
27.81.038.2788

● Thailand Sales Representative  
Bangkok, Thailand  
66.81.751.1447

● Hong Kong Sales Representative  
Hong Kong  
852.6850.4459

● Philippines Sales Representative  
Manila, Philippines  
63.908.958.8404

● Turkey Sales Representative  
Kadıköy/Istanbul, Turkey  
90.533.600.88.79

● India/SAARC Sales Representative  
Mumbai, India  
91.961.953.64.55

● Middle East Sales Representative  
Dubai, United Arab Emirates  
971.5.09519006

#### GLEN RAVEN LOGISTICS

● Corporate Office  
Altamahaw, NC  
800.729.0081

● Mexico City Terminal  
Mexico City, Mexico  
011.525.55.561.9448

● New Jersey Terminal  
Ridgefield, NJ  
800.729.0081

● California Terminal  
Garden Grove, CA  
800.729.0081

● Texas Terminal  
Laredo, TX  
800.729.0081

#### TRIVANTAGE

● Corporate Office  
Glen Raven, NC  
336.227.6211

● Consolidated Distribution Center  
Mebane, NC  
877.540.6803

● Texas Distribution Center  
Irving, TX  
800.786.7610

● Washington Distribution Center  
Tukwila, WA  
800.213.1465

● Southern California  
Distribution Center  
City of Industry, CA  
800.841.0555

● Northern California  
Distribution Center  
Hayward, CA  
800.786.7607

● Colorado Distribution Center  
Denver, CO  
800.786.7609

● Florida Distribution Center  
Miami, FL  
800.786.7605

● Georgia Distribution Center  
Austell, GA  
800.786.7606

● Illinois Distribution Center  
Elmhurst, IL  
800.786.7608

● Ohio Distribution Center  
Middleburg Heights, OH  
800.786.7601

● Missouri Distribution Center  
Maryland Heights, MO  
800.786.7603

● New Jersey Distribution Center  
Somerset, NJ  
800.786.7602

#### SWITCH FOUR

● Corporate Office  
Durham, NC  
919.808.4699

#### TRICAN CORPORATION

● Distribution Center  
Mississauga, Ontario, Canada  
800.387.2851

#### TUNALI TEC

● Cuernavaca  
Jiutepec, Morelos, Mexico  
800.00.88.6254

● Guadalajara  
Guadalajara, Jalisco, Mexico  
800.00.88.6254

● Cancún  
Cancún, Quintana Roo, Mexico  
52.998.279.3502