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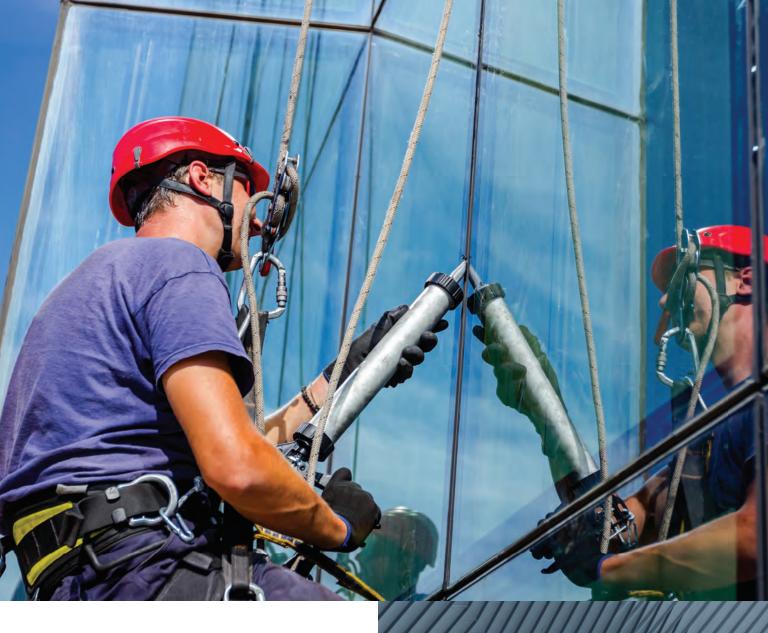
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EXHIBITOR LIST P. 100 SHOW PRODUCT
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SCHOOL SECURITY STANDARD P. 10



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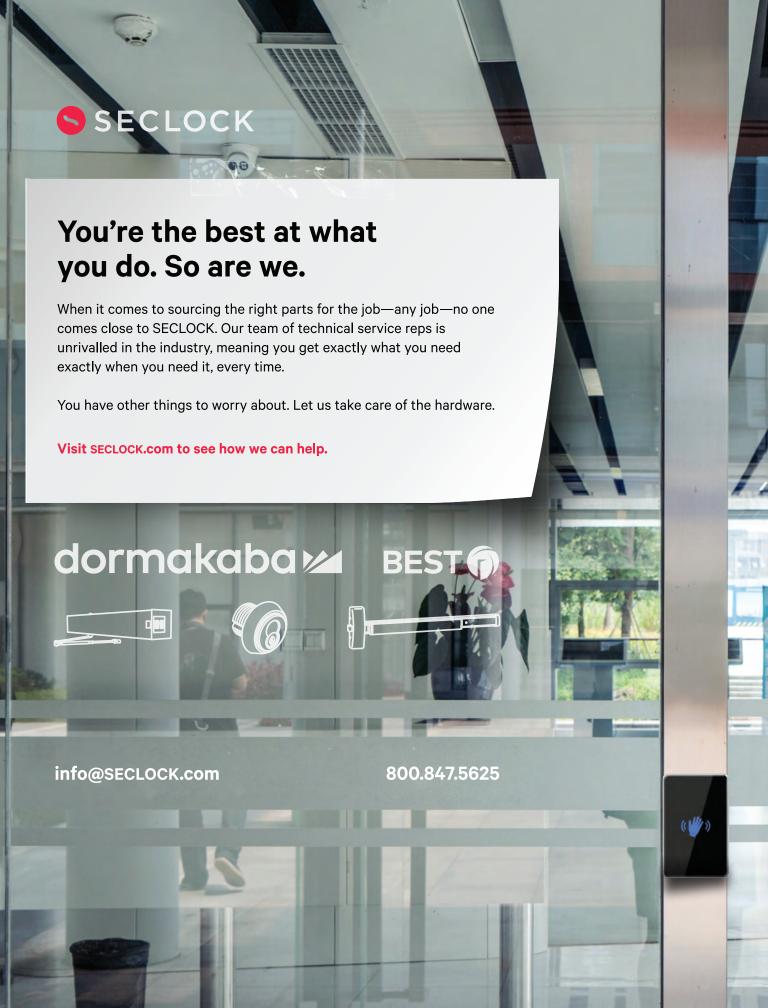
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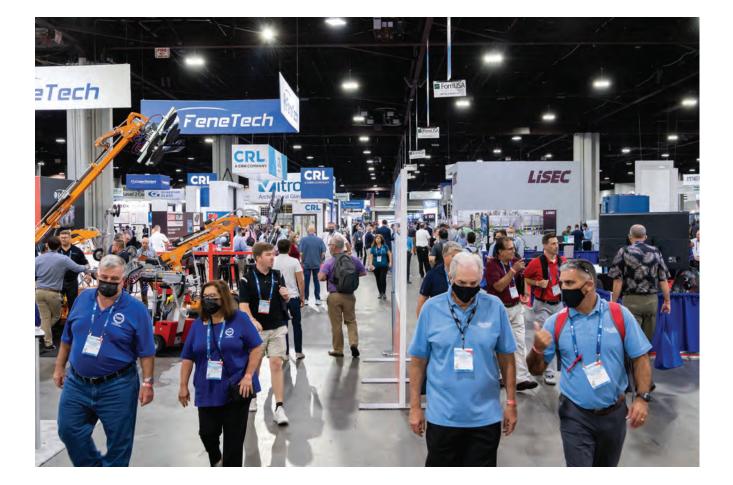
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# G L A S S

OFFICIAL PUBLICATION





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# ON THE COVER

Alexander Dominguez, glazier for JR Butler in Denver, stands next to a curtain wall unit for the Capstone project in Austin, Texas. Viracon was the glass fabricator. Photo courtesy of JR Butler. VIRACON NEUTRAL GRAY VNG-4022 LOW-E ARCHITECTURAL GLASS COATING:

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SCHOOL SECURITY

**Another Way Glass** Can Save the World By Karen Wegert, NGA



STATE OF THE INDUSTRY

**Big Notes from** the Road By Max Perilstein, Sole Source Consultants



DECORATIVE

**Applying Color to** Glass Spencer Raymond, GGI

# PROJECT SHOWCASE



Featured in Glass Magazine Weekly and on GlassMagazine.com. To submit projects or case studies, write Norah Dick, ndick@glass.org. Pictured: The new Hilton Garden Inn in Brookline. Massachusetts, features a range of glass and metal systems, all installed by R&R Window Contractors Inc. Installed products include 250T Narrow Stile Doors and 451 Storefront Framing

from Kawneer, and glass handrail components, engineering and interior sliding glass doors courtesy of C.R. Laurence. Pulp Studio contributed Custom Laminated Graphic Glass, part of the hotel's bar, and other systems were provided by ES Window/Techno Glass and Stanley Access Technologies.

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# An Industry of "First Responders"



KATY DEVLIN Editor-In-Chief kdevlin@glass.org

he glass industry has an opportunity to become a new type of "first responder" by providing security products that protect children, teachers and staff against school shooters, said Tino Amodei, co-founder of Armoured One, who presented during NGA Glass Conference: Chicago, held in July and hosted by the National Glass Association.

"We always seem to deem firefighters, police officers, SWAT teams and EMTs as first responders. But it's the people that are proactive that are true first responders," Amodei said. "The NGA is going to be a true first responder. The architects who design buildings are first responders. All of us in glass manufacturing and in technology development who are trying to make things better, make things affordable, we are all first responders. We are the only ones who can change the outcome."

Amodei was referencing the news that NGA has taken the major first step to making the glass industry a proactive leader in building safer schools. The association announced a new ASTM International document has been created through the F12 Security Committee entitled Standard Test Method for Forced-Entry-Resistance of Fenestration Systems After Simulated Active Shooter Attack. The document was created by NGA volunteer leaders in response to an increasing frequency and severity of school shootings. It addresses the need to slow and, if possible, prevent intruders from entering facilities through locked fenestration.

"At a meeting a few years ago, someone said, 'We have standards to protect sea turtles and birds, but we don't have anything to protect our children. It's time that needs to change.' So, we developed a standard," said Julia Schimmelpenningh, global applications manager at Eastman Chemical Co. "Acting [with] the first responder mentality, we took a look at it. We educated ourselves on school shooting occurrences. ... We reviewed all existing security test methods out there. ... We looked at adapting existing methods."

This isn't the first time the glass industry has served as a first responder in the event of natural

or man-made disasters. As I listened to Amodei and Schimmelpenningh speak on the industry's response to school shootings, I thought about other industry interventions following tragedies—the hurricane-impact systems developed in the wake of the devastation of Hurricane Andrew in 1992, or the new blast glazing technologies created after

"

THE GLASS INDUSTRY HAS A LONG
HISTORY OF BEING A FIRST RESPONDER—
OF DEVELOPING PRODUCTS THAT KEEP
OCCUPANTS SAFE IN THE EVENT OF
DISASTERS, ATTACKS OR EVEN EVERYDAY
ACCIDENTS.

"

the Oklahoma City bombing in 1995. And I thought about the everyday interventions to create safe and healthy buildings—the non-wired fire-rated systems that prevent dangerous breakage injuries in event of accidental impacts; the promotion of products that bring more light into buildings, without sacrificing performance, leading to better mental health outcomes, improved productivity, accelerated healing; the glass and glazing products for global sustainability and more.

The glass industry has a long history of being a first responder—of developing products that keep occupants safe in the event of disasters, attacks or even everyday accidents. And this standard is the first step in helping industry companies save lives against a different kind of threat. Learn more about the standard at glass.org.



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# YOUR ASSOCIATION AT WORK

NEED-TO-KNOW INFORMATION FROM THE NGA

# NGA ANNOUNCES ACTIVE SHOOTER TEST METHOD

The National Glass Association announced a new ASTM International document created through the F12 Security Committee entitled Standard Test Method for Forced-Entry-Resistance of Fenestration Systems After Simulated Active Shooter Attack.

Frequency and severity of school shootings have risen in recent years, and with it, an increased need for a relevant international standard that considers the need to slow and, if possible, prevent intruders from entering facilities through locked fenestration. Security glazing products are a part of the equation for designing and creating safer schools by deterring and slowing forced entry during active assault events.

After review of applicable security test methods, the school security task group of NGA identified gaps in the referenceable standards such as repeatable, mode-driven, consensus-based fenestration test methods, which included system weakening and forced entry. NGA's school security task group was successful in getting a new comprehensible, yet simple-to-administer standard through the multi-step review process within eight months.

The test includes weakening of the fenestration system with projectiles followed by mechanically-driven impact to simulate an active shooter weakening the system and trying to force their way in. Fenestration products are rated on eight levels of forced-entry resistance. The test gives a range of performance options with easy-to-assess pass/fail criteria and will give specifiers

"THIS STANDARD SHOULD
YIELD A GOOD SELECTION
OF ACCESSIBLE HIGHPERFORMANCE PRODUCTS
THAT, WHEN INCORPORATED
PROPERLY, MAY ADD A
HIGHLY FUNCTIONAL LAYER OF
PROTECTION FOR SCHOOLS.
THE GOAL IS TO HELP MINIMIZE
THE NUMBER OF INJURIES OR
FATEFUL OCCURRENCES BY
DETERRING ACTIVE SHOOTER
SCENARIOS."

JULIA SCHIMMELPENNINGH, TECHNICAL ENGAGEMENT MANAGER FOR EASTMAN CHEMICAL CO., LAMINATING TECHNICAL LIAISON FOR NGA'S FABRICATING COMMITTEE, AND MEMBER OF NGA'S SCHOOL SECURITY TASK GROUP

performance and cost options to fit their needs.

"This is a major step forward toward making schools safer against forced entry from active shooters," says Urmilla Sowell, NGA technical services and advocacy director. "NGA thanks the ASTM International F12 committee and the NGA school security task group members for their work on this issue, and to Julia Schimmelpenningh for her leadership and passion in advancing this standard."

# GLASSBUILD AMERICA HEADED TO DALLAS AND ORLANDO IN 2024 AND 2025

The National Glass Association has announced new locations for GlassBuild America: The Glass, Window & Door Expo in 2024 and 2025.

In 2024, GlassBuild will be held Sept. 30-Oct. 2 in Dallas at the Kay Bailey Hutchison Convention Center. In 2025, GlassBuild will be held Nov. 4-6 at the Orange County Convention Center in Orlando.

The changes in location deviate from GlassBuild America's regular rotation of Las Vegas and Atlanta. GlassBuild was originally slated for Las Vegas in 2024; however, the Las Vegas Convention Center will be under partial renovation in 2024 and not optimal for GlassBuild that year, according to organizers from the NGA.

The tradeshow was scheduled to head to Atlanta in 2025, but several factors led NGA to look at Orlando, including frequent requests from attendees and exhibitors, a modern convention center that can hold GlassBuild comfortably, and experience hosting other large construction-industry tradeshows like GlassBuild, according to show officials.

"NGA is very excited to share this announcement that GlassBuild America is moving to new cities in 2024 and 2025," said NGA Events Director Molly Grenn in a memo to GlassBuild exhibitors. "We hope to return to Las Vegas in 2026 and Atlanta in 2027."

For more information, visit glassbuildamerica.com. ■



# **GLASS ADVOCATE**

# NGA Technical Committees Drive Industry Education and Advocacy Efforts

Industry technical leaders gathered July 18-20, 2022, for NGA Glass Conference: Chicago, where NGA's Committee chairs provided updates on the important work accomplished by committee volunteers. Committee highlights from the conference:

# **Advocacy Committee**

In April 2022, NGA member companies

visited with Congressional members, legislative staff and agency officials from 12 states, plus the U.S.
Environmental Protection Agency and U.S. Department of Energy, to discuss issues relevant to the industry as defined by the NGA Advocacy One-Pagers: School Security, Bird-Friendly Glazing, High-Performance Glazing Promotes Building Resiliency and

Registered Apprenticeship Programs.

The association is planning a follow-up event to be held next spring. In preparation, the NGA Advocacy Committee and consultants are working to refine the industry topics to address with lawmakers and agency officials, based on information from the glass and glazing industry. A one-pager on Architectural Glass Recycling will





# GLASS ADVOCATE—NGA TECHNICAL COMMITTEES DRIVE INDUSTRY EDUCATION AND ADVOCACY EFFORTS

also be updated based on discussions with the EPA.

The NGA Advocacy Committee will participate in the new Clearinghouse on School Security, established by the new school safety legislation. NGA will recommend resources to guide school security glazing for schools.

Additionally, the group revisited a presentation from the January NGA Glass Conference: Long Beach. Task group members revisited the themes of the presentation, "Physiological Impacts of Light on Human Health & the Implications to Glazing," which included research

on violet lights' correlation to retinal development. The task group will meet with researchers again in September to keep informed and engaged as new research results emerge.

Visit the Advocacy page on glass.org to see the latest activities and links to resources.

# **Forming Committee**

NGA and several member companies are working with Building Transparency to develop the glass category for the Embodied Carbon in Construction Calculator, also known as EC3. The next task group meetings will include firerated glazing companies. The task group is also seeking volunteers with expertise in curtain wall.

The Health Product Declarations Collaborative will meet with NGA task group members to refine how glass should be reported on HPDs.

# **Fabricating Committee**

The NGA Fabricating Committee is updating the Laminated Glazing Reference Manual to reflect several updated ASTM standards and to add new sections including adhesion and



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# **GLASS INFORMATIONAL BULLETIN**

impact. A new Decorative Glazing Manual is planned for development as well as a new Mirror Design Guide. The proposed research project, Post Fabrication Edge Grinding of Laminated Glass, was reviewed and additional questions will be discussed with consultants.

The Fabricating Committee established new task groups to draft AIA presentations on several topics, including:

- School Security Glazing Options for Windows and Doors Installed in Schools
- Thermal Bridging Considerations at Interface Conditions
- Bird-Friendly Glazing Design
- Daylighting
- · Vacuum Insulating Glazing.

The NGA Fabricating Committee also called for volunteers to assist task groups in drafting or updating the following Glass Technical Papers:

- Benefits of Decorative Glass in Daylighting Applications
- Guidelines for Use of Capillary Tubes
- Emergency Egress Through Laminated Glazing Materials (This document will be updated to include tempered and IGU egress.)
- Use of Glass in Guardrails
- New Acoustic Performance of Vacuum Insulating Glazing (VIG)
- · New Bent Insulating Glazing Units
- New Challenges Faced by Fire-Rated Glazing.

The committees will meet next at the NGA Glass Conference: Miramar Beach, to be held Jan. 24-26, 2023, at the Hotel Effie Sandestin - Miramar Beach. Visit glass.org for more information and additional resources. ■

# **Point-Supported Glazing**

Architectural glass is typically supported by capturing the edges with framing. In contrast, point-supported glazing is attached to the structure using fittings directly connected through holes in the glass or with fittings through the joints between the glass. Structural glass canopies, skylights, guards, handrails and façades can be designed to be point-supported to reduce the visible barrier between the outside and the inside of buildings.

## Hardware

Point-supported hardware is supplied by several manufacturers. Typical hardware includes a simple bolt and patch plate system, a simple countersunk bolt, hardware with flexible washers and gaskets within the supporting structure, and hardware with articulated bolts.

The structural glass must be designed and fabricated properly to be compatible with the hardware system specified. The amount of stress in and around the holes in the glass will vary depending upon the location and size of the clamping hardware, as well as the load applied to and geometry of the glass lite. Glass holes and notches shall be designed and fabricated in accordance with the guidelines established in ASTM C1048 Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass. Loading requirements may dictate a more conservative approach to hole and notch locations than found in ASTM C1048. Design and fabrication processes should be coordinated.

# Vertical glazing applications

Vertical glazing can use monolithic or insulating glass units of fully tempered glass or heat-strengthened or fully tempered laminated glass. The weight of vertical façades can be floor-loaded, stacked or suspended. The weight of the glass for high vertical walls can cause buckling of the lites if they are stacked too high. Façade systems above a certain height, as determined by the project-specific hardware and glass makeup, will need to be suspended from above.

Deflection and construction tolerances as defined by the Engineer of Record must be incorporated into the façade design and connections to the building structure. The differential deflection of adjacent structural elements to which the glass is attached should be taken into account to allow for this movement within the perimeter framing of the glass opening and to maintain adequate bite and engagement.

# Sloped glazing applications

The fundamental difference between sloped/overhead glazing (15 degrees or more from vertical) and vertical glazing is that sloped/overhead glazing is subject to a permanent gravity load from its self-weight and may be subject to a long-term snow load or maintenance activity load.

Building codes require laminated glass or mesh screening beneath the glass for sloped glazing in order to retain broken glass fragments and prevent glass fragments from falling on persons below in the event of breakage.

# **Protective Impact Products** High Wind & Rain Flying Debris Security st. cloud window



# GLAZING INFORMATIONAL BULLETIN—POINT-SUPPORTED GLAZING

When designing laminated glass for sloped glazing, the interlayer properties for the appropriate load durations should be used. Snowdrift loading must be included in the calculation as it can often be several times the magnitude of the ground snow load. Flat roofs or canopies may also be susceptible to water ponding if the glass deflection under gravity load is excessive.

# **Design calculations**

Engineers who are familiar with the use of glass as a structural material have studied the experimental statistical analysis data, safety factors, and the breakage probability theories that form the basis for failure prediction models. They are able to determine the glass thickness required for the size of glass lites, and the applicable code-designated design loads, the usage of the glass, and its location on the building.

As a general guideline, an acceptable allowable stress at holes in glass is 9.700 psi (67 MPa) for fully tempered glass, and 3,500 psi (24 MPa) for heat-strengthened glass per ASTM C1048. These values can be used conservatively for designing to a probability of breakage equal to or less than 1/1000 lites and are applicable for short-term and long-term load duration. These values apply for cylindrical holes or countersunk holes within limitations (consult with the design engineer). The holes should be free of unacceptable edge damage and/or imperfections such as chips or shells. Higher stress values, alternate hole configurations, and alternate glass makeups may be used if validated by testing.

### Glass deflection

If the glass lite deflects laterally by more than half its thickness, large deflection, non-linear plate theory must be used when analyzing the performance of the glass. Finite element analysis is often required to determine the amount of stress and deflection of the monolithic tempered or laminated glass lite. The movement capabilities and limitations of each hardware connection system must be taken into account. Deflection of the glass lite under load causes the relative distance between the point supports to decrease. Allowance for this motion must be designed into the supporting fittings by using, for example, oversized holes or slotted connections.

The designer must limit the glass deflection under load by specifying thicker glass or altering the position or number of supporting points because the increased flexural strength of the glass does not change its stiffness. Accurate values for the interlayer properties are needed for analysis of point-supported laminated glass. These properties are dependent on temperature, interlayer type and load duration.

## Safety

It is very important to assess the safety implications of glass breakage and associated risk of injury from falling glass. Design redundancy must be used to avoid or greatly reduce the possibility of progressive collapse of the point-supported system should one element fail.

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# **Guardian Glass Sells** Two Russian Facilities

In response to the Russian aggression against Ukraine, Guardian Glass has sold its two float glass manufacturing facilities in Russia, according to officials. The sale will affect 600 employees, according to a statement from Dave Robertson, president and chief operating officer of Koch Industries, the parent company of Guardian. Robertson first announced the company's plan to close the facilities in April.

The business was sold to Vladimir Alexandrovich Voronin, president of FSK Group, a private enterprise in the construction industry.

"This is an outcome facilitated and supported by plant employees and complies with all applicable sanctions, laws and regulations," Robertson says in a company press release. "We continue to condemn Russia's actions and aggression in Ukraine and remain united in support of all who have been harmed by this horrible conflict."

# Saint-Gobain Offers New Low-Carbon Glass

Saint-Gobain Glass is now offering a new glass with the lowest embodied carbon on the façade market, according to the company. The new products will use a glass with an estimated carbon footprint of only 7 kg CO<sub>2</sub> eq/m<sub>2</sub>, for a 4-millimeter substrate.

This new low-carbon glass will be combined with the existing Cool-lite Xtreme coating technology, which already reduces carbon emissions generated by energy consumption needed when using the building

thanks to its high performance in terms of daylight intake, solar control and thermal insulation. As a result, the new range will offer the lowest carbon footprint on the market, say company officials, with a reduction of around 40 percent compared to its European baseline product.

# **Solar Seal Closes Massachusetts Location**

O3 officials confirmed that the South Easton, Massachusetts, location of Solar Seal will be closing. Solar Seal Architectural, a location in Connecticut that is licensing the name, has no common ownership with the South Easton location, and will remain open. 03 Industries acquired the company's South Easton facility after the bankruptcy of its parent company, Consolidated Glass Holdings.



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# Şişecam Invests in Second **Patterned Glass Line**

Şişecam invested in a patterned glass furnace with a capacity of 661 tons per day and energy glass processing lines with a capacity of 21.5 million square feet per year. This new investment in Mersin/ Tarsus OIZ in Turkey amounts to \$190 million, including working capital. With this latest investment, Şişecam aims to be one of the main suppliers in the renewable energy investments globally, say officials.

# AGC Glass Europe to Launch a New Low-Carbon Glass Range

AGC Glass Europe announced a new glass range with a significantly reduced carbon footprint, to be launched by the end of 2022. "I am very proud to announce that, with our continued progress in decarbonization, AGC will launch its first low-carbon glass product range by the end of 2022," says Davide Cappellino, president of AGC Architectural Glass Europe & Americas. "This represents a key milestone in our road map to carbon neutrality."

# **Powr-Grip Purchases Aegis** Tools' Assets and Trademarks

Woods Powr-Grip Co., a manufacturer of vacuum cups and vacuum lifting equipment used to handle glass and other materials, has purchased AEGIS Tools International Inc.'s assets and trademarks. AEGIS is a designer and manufacturer of windshield repair equipment and auto installation tools. This decision comes as AEGIS owners Robert and Caryn Birkhauser plan on retiring nearly four decades after Robert developed the first AEGIS Windshield Repair System.

"Our relationship with WPG goes back to the very beginning of AEGIS, because most of our proprietary products are



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based on WPG components," says Robert Birkhauser. "We know that our products and customers will be in excellent hands."

# Peerless Products Expands Facility

Window and door manufacturer Peerless Products Inc. announced it will expand its existing facility in Nevada, Missouri; investing \$3.5 million and creating 111 new jobs. This expansion will increase the company's production capacity at the facility, which is used for warehousing, manufacturing, and research and development.

In addition to adding 111 new jobs, the company's expansion includes significant investment in new machinery and equipment. Renovations of its 220,000-square-foot location are underway to update the space and ensure readiness for continued growth. The company plans to host an open house and ribbon-cutting ceremony later this year.

# Consolidated Glass Breaks Ground on Glass Lamination Line

Consolidated Glass Corp. broke ground on its new glass lamination line, which will be installed and fully operational by the first quarter of 2023.

"Seeing this dream become a reality is a dream come true. This exciting addition to our operation will allow us to begin servicing new markets, while propelling Consolidated Glass Corp. forward into the next phase of our long-term growth plan," says Shane Merryman, president and CEO.

# Petersen Opens New Manufacturing Facility

Petersen opened a new PAC-CLAD manufacturing facility in Bonney Lake, Washington. The facility will be equipped to provide new and existing customers in Washington, Oregon, Montana, Idaho, Utah, south to Fresno, California, and British Columbia with PAC-CLAD steel and aluminum cladding products, including standing





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### NEWS TO KNOW

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# Trulite Canada Adds **Fusecube Express**

Diamon-Fusion International announced that Trulite Canada has added the FuseCube Express to its line of fabrication capabilities. The protective glass coating machine streamlines the application of Diamon-Fusion glass treatment onto both sides of the surface, allowing Trulite Canada to offer easy-to-clean, low-maintenance benefits to their line of glass railing and architectural systems, say officials.

# Vitro Celebrates 50-Year Anniversary

Vitro Architectural Glass celebrated 50 years in business by planting two trees outside of its manufacturing plant in Carlisle, Pennsylvania, which has been in commission since 1972. "The planting of two trees on our site is a small, yet symbolic tribute to the two production lines at Carlisle that are responsible for producing glass that helps keep buildings and homes energy-efficient," says Darrell Jewell, Vitro Carlisle plant manager.

# PEOPLE NEWS



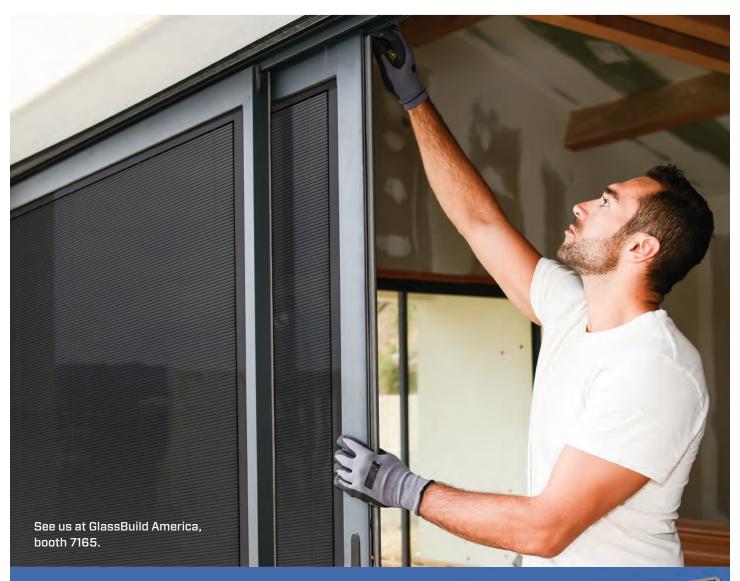
**Halio** added *Dmitry Lipkin* to its leadership team as vice president of global marketing.

Lipkin has over 27 years of high-tech

marketing experience and strong industry relationships to the company. Previously, he has led global marketing teams with companies such as NXP Semiconductors, Maxim Integrated, Applied Materials, and Flextronics.



**AkzoNobel** introduced Gregoire Poux-Guillaume as its new CEO. The 52-year-old French national brings 25 years of international business



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### NEWS TO KNOW

leadership experience, previously serving as CEO of Sulzer and CEO of GE Grid Solutions.

Poux-Guillaume replaces Thierry Vanlancker, as his term comes to an end after five years in office. He begins officially on Nov. 1, pending Board of Management shareholder approval at the Extraordinary General Meeting.





Mammaro

**GIMAV**, the General Assembly of the Italian Association of Suppliers of Machines and Accessories for Glass Processing, named Dino Zandonella Necca as president of the association. Zandonella Necca will serve as president from 2022 to 2026.

Zandonella Necca is the CEO and president of ADI Srl, a member of the Board of Surfaces Group and the former president of Vitrum since 2015. He was elected during an assembly meeting on June 29 at its office in Milan.

Nancy Mammaro, CEO of Mappi, was also elected vice president with responsibility for the sector flat glass by GIMAV, the Association that brings together the Italian manufacturers and suppliers of machines, accessories, equipment and special products for glass processing.







# Vitro Architectural

Glass named Dan Stipetich as its new director of commercial sales for the U.S. In this new role, Stipetich will lead a team of commercial account managers across the country, serving the commercial construction industry.

The company also appointed *Heather Brion* as director, U.S. Architectural Development. She previously held the

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# WATER TREATMENTS FOR GRINDING TECHNOLOGY







### **NEWS TO KNOW**

position of director of architectural development for the Western region.

Additionally, *Joe Sennese* is now Vitro's manager of product sales and business development. He has 25 years of experience in the construction products industry, 16 of those with Vitro.



leff DeLonav.

## **Kolbe Windows & Doors**

appointed *David Zentrich* as the new vice president of information technology. Zentrich joins the company's executive team and reports directly to Kolbe's president,

Zentrich brings over two decades of experience in a variety of industries to Kolbe, from health care to manufactured housing. Kolbe hopes Zentrich's background in strategic and technical leadership, as well as infrastructure modernization, will assist in advancing Kolbe's corporate initiatives.



Xinglass appointed Joseph Santelli as sales representative in the U.S. and Canada. In this role, Santelli will be responsible for the sales of glass tempering furnace products in North America. Santelli has more

than three decades of experience and expertise in the field of glass tempering furnaces and glass processing.



Mavnard

**SmartGroup America**, a new company offering a glass lifting manipulator, appointed *Eric* Maynard to lead its marketing efforts as the national sales director. In his new role, Maynard will

focus on building SGA's brand awareness through marketing, sales, and educational offerings while building a support and sales team to serve the glass and glazing communities across the nation. ■

\*From July 8 to press time Aug. 4. Read these stories, and others, in their entirety at GlassMagazine.com.



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# INSIGHTS

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# THE BOTTOM LINE

SPECIFIC MANAGEMENT OF INSURANCE CLAIMS IS A KEY COMPONENT TO EFFECTIVE RISK MANAGEMENT IN RESPONSE TO ANY LOSS, BE THAT EMPLOYMENT, PROPERTY, AUTO OR GENERAL LIABILITY.

> subcontractor fell from a ladder and was injured. A lawsuit followed against the builder and painting company.

The job contract between the builder and the painting company required that the builder be named as an additional insured on the painter's insurance policy. The builder independently notified the painting company's carrier and demanded a defense of the lawsuit under the terms of the job contract. The painter's carrier responded and defended the claim against the builder.

The painting company did not notify its insurer. Instead, the painting company retained a lawyer and began defending the claim at its own expense. It continued to defend the claim even after its own insurance company reached out asking about the claim due to the builder's additional-insured notice. At no point did the painting company specifically ask its insurer to defend or indemnify it from the lawsuit's claims.

A key issue before the Fifth Circuit was whether the insurance company owed an obligation to the painting company on the policy contract when it knew of the claim but never received a specific request for defense. The court said no. At its most basic, the court found that unless an insured directly asks for the benefits in a policy contract, an insurance company does not need to respond, even when it knows about a claim.

# LEGAL

# **CLAIM DENIED**

COURT CASE DEMONSTRATES THAT JUST HAVING INSURANCE ISN'T ALWAYS ENOUGH

BY MATT JOHNSON



nsurance policies are contracts that require the same attention and management as agreements for purchase and sale. Simply having "insurance" is not enough to recover the benefits for all the premiums paid to maintain that coverage. A recent court case involving an injured worker emphasizes the point.

## Moreno v. Sentinel Insurance

The case was Moreno v. Sentinel Insurance and was decided by the Fifth Circuit Court of Appeals. It was a seemingly straightforward workplace injury claim: an employee of a painting



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# Case takeaways

Conditions and caveats to that broad conclusion can exist. The painting company's conduct may have played an outsized role in the decision from the court. Despite that, the value in the decision remains: specific management of insurance claims is a key component to effective risk management in response to any loss, be that employment, property, auto or general liability.

# Notify of potential losses

Direct, specific notice of a new potential loss must be timely and effectively presented to an insurer. This means knowing what insurance contracts are available and the benefits that should be demanded when submitting a claim. A good broker can help here. It also means complying with claim submission requirements and being able to document that the demand was submitted.

# *Incomplete is better than nothing*

It is also important to remember that early notice does not need to be complete to be effective. Most claims come in with very little information. This should not mean notice on an insurance contract is delayed. Insurance companies are in the business of gathering information to assess risk throughout the life of a claim, and an initially incomplete notice is better than no notice.

# Provide supplementary information

No matter how much information is provided with the notice, additional information will come to light as a loss is investigated. Insurers will request foundational information at intake and regular updates throughout the life of a loss claim. Active supplement of information and response to carriers can help maximize policy benefits and is very likely a requirement of the policy contract.

# Track correspondence

When an insurer responds to notice, keep track of those responses and positions. Where a claim's circumstances are unclear, an insurer may agree to assist based on a "reservation of rights." This is a legal position that allows the carrier to help but preserves reimbursement and other rights within the policy if the facts change. Careful review, assessment and response to these positions can help preserve an insured's rights.

# Don't fear giving notice

Finally, do not fear giving notice because a claim might be denied or there is some uncertainty whether it falls within the policy terms. As mentioned, insurance carriers have teams to investigate notices and issue claim responses. Where a claim is submitted but later denied, a contractual contest may be possible. But where no notice is given, that contest often never gets very far, as our painting contractor found out the hard way.

Matt Johnson is a member of The Gary Law Group, a Portland, Oregon-based firm specializing in legal and risk issues facing manufacturers of glazing products.







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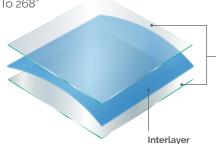
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# UNLOCK THE BUSINESS-BUILDING SECRET OF GLASSBUILD AMERICA

BY CRISTINA MURRAY





n just a few weeks, about 8,000 of your colleagues in the glass and fenestration business will gather at GlassBuild America. This year's Las Vegas event promises to be one of the best ever, with more than 400 companies exhibiting the latest industry advances along with a high-powered slate of educational sessions. All in all, it promises to be a spectacular three days.

# **Education first**

Being at the center of the glass universe presents a world of possibilities. For many, education is right up there with sales. What's the latest in fenestration code? What's being discussed by code committees? What's new in agency regulations and safety requirements? The scheduled education sessions promise many revealing insights that can help guide your product planning process.

GlassBuild America also presents another kind of education. While less formal, it yields breakthroughs of a different sort. I'm talking about the vast array of companies in attendance. Like nowhere else, the event offers up an immense range of potential solutions to any supply chain challenges you may be facing.

Chances are you've already vetted numerous alternative component suppliers as a hedge against future disruptions. You may be actively considering different materials, say a comparable part from a different supplier that promises improved availability, lead times or both.

# Searching for suppliers

GlassBuild America is the perfect place to supercharge your supplier search. Where else can you go face-to-face with potential suppliers that may be unknown to you now? The show is an exclusive opportunity to ask four questions every performance-minded insulating glass manufacturer should consider in a vendor selection:

- 1. Does the material meet the specification of my product?
- 2. Is it adaptable with my equipment or machinery?
- 3. Is the supplier easy to work with?
- 4. Is it going to provide the quality and durability my customers expect?

# Thinking long-term

The answer to each of these questions is important. However, it's the last question you'll want to pay special



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attention to. Any change to how you develop or build your product has the downstream potential to impact your company long after delivery is made.

Keep that in mind as you consider adjustments to your supplier network. Especially as it relates to:

**Product warranties.** Field failure is one of a window manufacturer's biggest concerns. Making replacements is not

only costly, but disrupts your production schedule. It also puts your reputation in peril. How likely is a customer referral if a unit fails within a year of installation?

Internally, your team will need to identify the failure cause and make sure it doesn't happen again. Perhaps it was a replacement spacer used as a stopgap measure to keep production rolling. Are you on the hook for dozens, perhaps hundreds, of faulty products? Why

put yourself through that? GlassBuild America is a superb time to assess the best of the best.

Value-added service. Yes, product availability and lead times factor huge today. But don't neglect the other services that may be available through a new supplier.

Consider staff training, for example. In the case of a spacer failure, a deep dive into the cause might reveal an assembly issue. A spot check of numerous units might show similar spacer application mistakes. No single person may be responsible. It could be a training issue, understandable these days because of high turnover and new hires on the production line.

Does your spacer supplier—or other supplier—have your back on how to confidently institute best practices on the assembly line? Are they able to provide fast technical assistance? Will they help audit your production process and help you identify and troubleshoot any other material or assembly issues?

A "yes" to those questions may give you a leg up on competitors and add dimension to your product catalog. Don't underestimate what a fresh pair of eyes, along with a different manufacturing experience and perspective, can bring to a production line as well as your bottom line.

# Making the most of the show

You have an opportunity to network with countless suppliers at GlassBuild America 2022. Make the most of your time there. Ask questions. Evaluate responses. Scout out potential new partners that offer the insights and materials you need to power your operation to new heights of quality, efficiency and performance.

Put this world-class event to work for your leadership team, workforce and customers. ■

Cristina Murray is director of marketing, North America for Quanex.



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### MAKING AN ENTRANCE

TRENDS IN GLASS DOOR & ENTRANCE SYSTEMS BY MARK SUEHIRO



lass door and entrance systems must meet a multitude of criteria that include requisite functionality, aesthetic benefits and complying with performance and safety measures. This can become a tall task. But by looking at industry trends in glass door design, architects and glaziers can better select and install systems that effectively balance looks, performance and durability.

### 01

### TALL GLASS DOORS

In retail spaces first impressions are everything, so installing striking glass entrance systems that quickly catch the eye is key. That's why monumental glass doors with heights ranging from 10 to 12 feet are becoming more prevalent. New technologies and fabrication methods



allow smooth operation of these heavy glass doors, and now tubular panic devices have been developed that can complement these heights.

The type of glass that must be used varies as the glass door gets taller. This is because of wind load and deflection factors. Also, at greater heights, certain door hardware like patch fittings are no longer enough to secure the door, so full-length top and bottom door rails are required. The National Glass Association's Heavy Glass Door Design Guide is an excellent resource for information on glass compatibility in relation to door height.

### 02

### LARGE-SCALE MOVABLE WALLS

Commercial establishments, particularly restaurants, are creating open-air spaces

that provide seamless transitions from interiors to exteriors. This produces engaging environments with visual stimulation and bustling energy. An increasingly popular way of doing this is by selecting expansive movable walls that take the form of large-scale sliding and bi-folding doors. Newer systems feature minimal panel frames so there's less obstruction. They're also available in heights of up to 13 feet to enhance daylighting, views and perceived openness.

If large-scale bi-fold and sliding doors are being installed in coastal regions with high winds, check that they have Florida Product Approval. This speaks to the system's resiliency as it complies with Florida building code. It is also important to check that the manufacturer has performed adequate cycle testing to ensure structural integrity after extended use.



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### 03

### THERMALLY-IMPROVED SYSTEMS

With the challenges that climate change has brought to building design, energy-efficient doors are now becoming the norm, particularly in regions with extreme heat or cold. New fabrication technologies have resulted in advanced entrance systems that offer great thermal performance. This means they're effective at keeping interior temperatures cool during the summer and warm during the winter, placing less strain on heating and cooling systems.

For best results, thermally-improved glass doors should be paired with 1-inch insulating low-emissivity glass. The airspace between the glass can be filled with argon gas for even better performance. Keep in mind that next-generation thermal doors feature ultranarrow 1-1/8-inch stiles, delivering an ideal balance between thermal performance



and in-demand, all-glass aesthetics.

Each of these trending glass door and entrance systems meets a different industry need, but in each case, they appeal to architects, building owners and end users alike. Consequently, they present striking designs that leave lasting impressions while meeting performance requirements, and should be strongly considered for upcoming entrance and movable wall installations. ■

Mark Suehiro is the technical director of architectural hardware at C.R. Laurence, with more than 25 years of industry experience.



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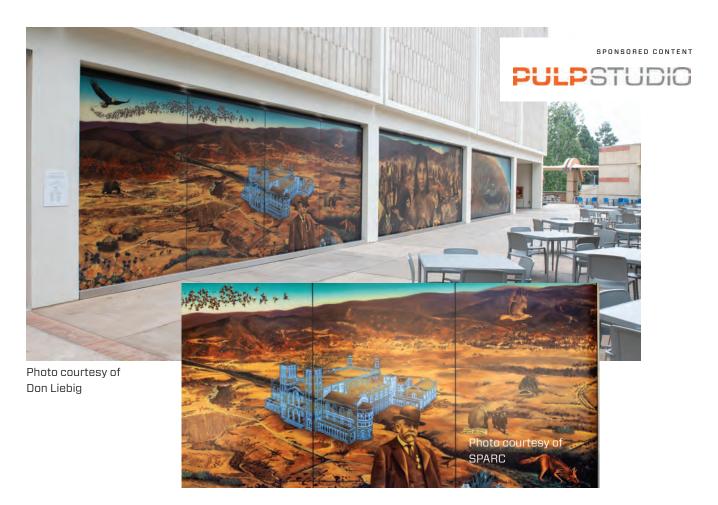
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### GREAT GLAZING: LA MEMORIA DE LA TIERRA: UCLA

The basics: Pulp Studio created a unique, mineral-ingrained glass artwork mural for UCLA's Centennial that is a permanent celebration on campus. Pulp Studio worked with artist and Professor Emeritus Judy Baca and the SPARC team. Developed through two prototypes and multiple full scale mock-ups, prior to the final fabrication of the production, the mural commemorates the excavation of Westwood. and the diversity of people who have attended and supported the University from the beginning to the present.

The design: The story of Westwood flows over three 26-foot-long panels, which begin with a tribute to the land, detailing where the Los Angeles River once flowed through campus and where original tribes and native flora and fauna thrived. The second segment pays homage to the

many men and women who have shaped the UCLA community beyond the physical borders of the campus. The final segment of the mural represents an imaginative depiction of the future in which the ever-changing university is in harmony with the original land.

The artistic team: The mural is the result of a partnership between the UCLA Centennial Committee: Associated Students UCLA, or ASUCLA, a nonprofit association that supports student services and activities throughout campus; the Digital Mural Lab from the Social and Public Art Resource Center, or SPARC; and is by lead artist Judith Baca, who is an activist and UCLA professor emeritus, and who envisioned the imagery and sought mixed mediums in art and print to incorporate into the

LOCATION: ACKERMAN UNION BUILDING. UCLA CAMPUS, LOS ANGELES GLASS SUPPLIER: PULP STUDIO ARTIST: JUDITH BACA, PHD

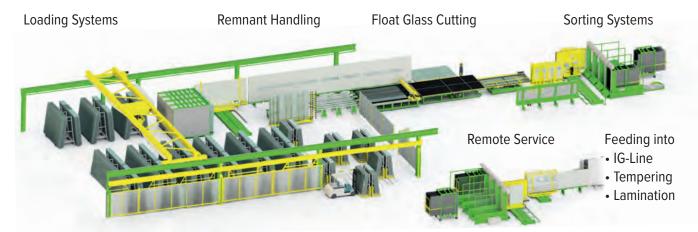
mural. Pulp Studio fabricated the glass; Rountree Glass was the installer.

The glass: The first surface of the glass is an anti-reflective/non-glare coating which has been tempered and laminated with SentryGlass Plus for an overall thickness of % inches. The second surface features Pulp Studio's D2G imaging process which digitally prints images with ceramic ink directly to the glass surface. The ink is fused with heat into the surface creating an image that has a high durability and permanence. Each panel is printed from top to bottom creating a full overall image which is reminiscent of a painting and fitting for an art piece honoring 100 years of the University's history. Learn more at pulpstudio.com or

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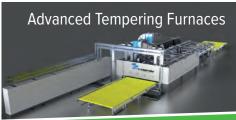


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# SEE EVERYTHING IN GLASS, OCT. 18-20 IN LAS VEGAS

BY KATY DEVLIN



"See Everything." That's the theme of 2022 GlassBuild America: The Glass, Window & Door Expo, taking place Oct. 18-20 at the Las Vegas Convention Center. According to organizers from the National Glass Association, the tradeshow will be the largest industry gathering in North America, where representatives from all segments of the glass and fenestration industries can see new product and equipment solutions,

interact with customers and suppliers, participate in continuing education new learning opportunities, and more.

"The number one reason individuals attend is to see the exhibitors and their products, but we also often hear they would like more education and more casual networking," says Molly Grenn, NGA event director. "Coming up in Las Vegas, we will be delivering both."

GlassBuild 2022 will feature more than

400 exhibitors over a 155,000-square-foot show floor. The show will include more than 90 international exhibitors representing over 20 countries. Additionally, more than 60 first-time exhibitors have signed on for the show. See new product innovations set for display at GlassBuild in Glass Magazine's Product Showcase, beginning on page 52. Find trend information and new product announcements for fabrication machinery,

handling and transportation equipment, software, glass and component products, glazing systems, hardware and more.

### Investments and trends

"Attending GlassBuild is [a] way to keep our finger on the pulse of the industry," says Jennifer Walrich, product manager at Magid Glove and Safety. Attendees to the show can see new product innovations and equipment solutions firsthand and have much-needed in-person interactions with their suppliers and customers.

"I look forward to having face-to-face meetings with partners I have only spoken to on the phone yet never met in person and learning about new products and services," says Syndi Sim, vice president, marketing and business development, Diamon-Fusion International Inc. "This year more than others, I look forward to spending time with industry colleagues—having an open dialogue about the challenges we are facing now and in 2023."

Attendees say GlassBuild will be the venue for making investment decisions for their companies. "We make all our purchasing decisions based on our visit to GlassBuild. It's a one-stop shop," says Bill Sullivan, president and CEO, Brin Glass Co. "We can plan for our future and our current purchases."

Additionally, the show helps glass companies prepare for trends and opportunities to come. "GlassBuild is a time to get together and compare notes with other industry partners to see their vision for the future of our industry," says Morgan Donohue, president, Erdman.

### Facing challenges together

The industry returns to GlassBuild following a year of uncertainty and challenges. Companies continue to struggle to find labor, while tackling inflation and supply chain issues. The best way to try to tackle those challenges, according to attendees and exhibitors, is by coming together. At GlassBuild, attendees can meet face-to-face with suppliers and customers, network and share solutions with

# "WE MAKE ALL OUR PURCHASING DECISIONS BASED ON OUR VISIT TO GLASSBUILD. IT'S A ONESTOP SHOP"

Bill Sullivan, president and CEO, Brin Glass Co.

### SCHEDULE AT A GLANCE

Monday, Oct. 17	10 G
9 a.m4 p.m.	S
Registration Open	
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Oct. 18	9
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Glazing Executives	
Forum*	10
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Tradeshow Open

Wednesday, Oct. 19
Stage Programming
GlassBuild Main
10:30 a.m3 p.m.

Wednesday, Oct. 19 9 a.m.-5 p.m. Registration Open 10 a.m.-5 p.m. Tradeshow Open

10 a.m.-4:30 p.m. GlassBuild Main Stage Programming **Thursday, Oct. 20**9 a.m.-1 p.m.
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peers, hear important market updates and forecasts from experts, learn about new technologies to ease top challenges, and more.

"Undoubtedly, the industry is facing some significant challenges," says Sim. "We need to continue coming together with solutions. Bringing all facets of the industry together is vital during challenging times. Additionally, attending NGA events is crucial to stay updated on regulations, industry standards and changes in the economic environment."

Tim Nass, vice president of national sales, Safti First, adds: "What we are seeing now is really unique, and hopefully a temporary economic phenomenon. But supply chain disruptions and pricing volatility has been a real issue. The key is communicating with the stakeholders so they understand the issue in real time."

### **Education and networking**

Attendees can find additional tools to tackle the industry's top challenges at

a series of education and networking events during GlassBuild.

### **Glazing Executives Forum**

The popular Glazing Executives Forum returns for its 16th installment at GlassBuild. "The Glazing Executives Forum gives glazing company leaders the chance to brainstorm business solutions with peers and industry experts, an opportunity that is especially important in a market challenged by supply chain issues, pricing fluctuations and staffing shortages," says Jenni Chase, NGA director of education & training.

"Our number one [reason for attending GlassBuild] is attending the Glazing Executives Forum," says Brin Glass' Sullivan. "Listening to the keynote speakers, the ITR economic presentation, connecting and re-connecting with my peers in the industry is very valuable."

The event will take place Oct. 18 from 8 a.m.-5 p.m. in the Las Vegas Convention Center Rooms. Separate registration is

# "WE NEED TO CONTINUE COMING TOGETHER WITH SOLUTIONS. BRINGING ALL FACETS OF THE INDUSTRY TOGETHER IS VITAL DURING CHALLENGING TIMES."

Syndi Sim, vice president, marketing and business development, Diamon-Fusion International Inc.



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required to attend the Glazing Executives Forum. Visit glassbuildamerica.com for additional information.

### GlassBuild Main Stage

New at this year's show is the Glass-Build Main Stage, where all attendees have an opportunity to access quick-hitting, need-to-know industry forecast and trend information. Topics will include everything from a technical and codes update to the construction economic forecast, and fabrication best practices to information on curtain wall design and testing. The Main Stage, located in booth #10206, will also host the announcement and presentation of the 2022 Glass Magazine Awards. Visit glassbuildamerica.com for the complete Main Stage schedule.

### **Tailgate Party**

Brand-new for 2022, attendees and exhibitors can participate in the Glass-Build Tailgate Party, Thursday, Oct. 20, from 12-2 p.m.

"The show will close this year with the GlassBuild Tailgate Party to give attendees a chance to unwind with their industry friends with music, games, food trucks, beverages, and a grill throwdown among industry members," says Grenn. "It's going to be a great time."

Registration is \$10 per person, with ticket proceeds going to the NGA Foundation to support glass and glazing industry educational programming. The Tailgate Party is sponsored by CRL and is open to all registrants of GlassBuild and the Glazing Executives Forum. Learn more at glassbuildamerica.com.

#### Return to normal

Exhibitors say GlassBuild America 2022 will continue the industry's return to more normal operations since the start of the pandemic. The show was cancelled in 2020 and returned in person in 2021, but welcomed fewer attendees and international exhibitors due to travel challenges and continued pandemic concerns.

"This is the first GlassBuild back in Las Vegas, and the first show in what might be considered normal times," says Barry Wood, vice president, marketing and commercial development, Woods Powr-Grip. "Last year, in Atlanta, there were still a lot of people who were hesitant to travel and be in crowded places. It was also really hard to travel internationally. So, there were very few representatives from overseas. At this point, I have already set up a dinner with a distributor who will be flying to the U.S. for the show."

Ann Greco, strategic marketing director, Salem Fabrication Technologies Group Inc., adds that in-person events were missed during the height of pandemic closures. "In-person events are better than the virtual online events we've had to make do with over these past couple of years," she says. "The networking, customer relationship-building, search for new suppliers, and industry educational opportunities cannot be matched virtually."





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Come see us at GlassBuild Las Vegas! October 18-20, 2022



## GLASSBUILD PRODUCT SHOWCASE

54. MACHINERY + EQUIPMENT 82. GLASS + COMPONENTS 90. METALS, SYSTEMS + HARDWARE

For the glass and glazing industry, the previous two years have been defined by investment and innovation. Faced with ongoing labor and supply concerns, glass companies are making investments in new equipment, software and tools to improve processes and quality. They are increasingly looking to automate and improve efficiency, despite having less available labor. And they are developing new, innovative product solutions that help their customers address top challenges and meet market demands.

"Product innovations are perpetual, and we are either staying ahead of, or keeping pace with, the trends we see at the architectural level," says Tim Nass, vice president of sales, Safti First.

The product solutions and innovations for and by companies across all segments of the industry will be on display in one location during GlassBuild America: The Glass, Window & Door Expo, Oct. 18-20 in Las Vegas.

"GlassBuild is about providing solutions," says Nicole Harris, president

### INDUSTRY INVESTMENT

The glass industry's innovation trend was made clear in the 2022 editions of Glass Magazine's premiere market surveys, Top Glass Fabricators and Top 50 Glaziers.

Consider:

#### 89%

of Top Fabricators added production capacity in 2021

### 71%

of fabricators have plans to invest in capital equipment this year

### **50%**

are introducing new product lines in 2022

### **69**%

of Top 50 glaziers invested in new fabrication capabilities in 2021

#### 67%

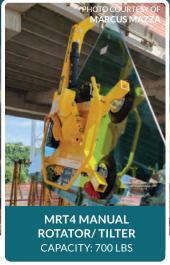
invested in software

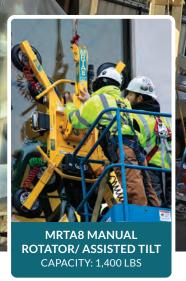
and CEO of the National Glass Association, the show's organizer. "Whether it's finding a new supplier, product or machinery from among the exhibitors, or learning about latest trends from one of our speakers, or just comparing pain points with fellow attendees—we know that everyone walks away from GlassBuild enriched with new information, new contacts or new products to help them better navigate the industry's challenges. Some challenges, like global supply chain issues, are bigger than just our industry but coming together directly with our industry's suppliers and experts at GlassBuild can provide attendees with a different outlook to view problems and solutions—more strategically."

On the following pages, Glass Magazine presents the 2022 GlassBuild Product Showcase, highlighting new machinery, equipment, glass and glazing products, metal systems and more. For additional products from these and other GlassBuild exhibitors, visit glassbuildamerica.com.











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CHAPTER

01

### **MACHINERY + EQUIPMENT**

### TRENDING

MORE AUTOMATION // FEWER TOUCH POINTS // ERGONOMIC DESIGNS

For many in the industry, GlassBuild is the place to see new machinery, equipment and tools. Exhibitors will be displaying lifters for safer handling of larger and more glass, new software for companies of all sizes, automation solutions for the factory floor, and more.

"We wouldn't even be in the manufacturing space if it wasn't for GlassBuild," says Keith Daubmann of My Shower Door, My Architectural Glass, D3 Glass. "As [our company] started ... getting into manufacturing, the first thing we said was we need to be at GlassBuild and [to] start educating ourselves on all the different machines and capabilities that are out there so we can run efficiently and provide a high quality to our customers. It all started at GlassBuild."

Suppliers say they are focused on providing products that help their cus-

tomers produce high-quality products efficiently and safely, while reducing the demand for labor. "The glass industry is suffering from the labor shortage, and there is a strong need for automation," says Mike Willard, CEO of exhibitor Salem Fabrication Technologies Group Inc. "Customers will be looking for ways to repurpose labor as they install automated systems to handle glass."



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See us at GlassBuild America, booth 5050.

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DENVER



Denver Advance Elite transforms glass from the cutting table to the final product.



01

### Adelio Lattuada - Lattuada North America

TLR 11 AV C PC H85 is a fully automatic
11-wheel mitering machine equipped with the company's A-WR System, which features diamond and resin wheels, automatic pre-setting, plus polishing wheels and automatic wear recovery. The product also features i-AL for automatic adjustment of the machine's parameters based on glass thickness. The product has a motorized adjustable infeed conveyor, digital ammeters and an automatic alert system for polishing wheel wear, and is equipped with teleservice. Booth #5104.

+(39) 0331-8327-13 | adeliolattuada.com

Bavelloni America Inc.

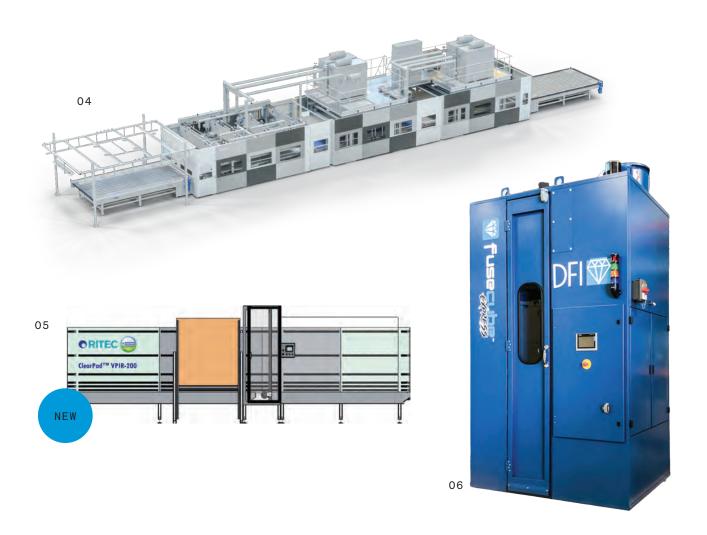
02

Bavelloni's VDM 1636 CN is a vertical milling and drilling machine designed for shower door production and architectural applications. Equipped with opposing spindles, each with rotating eight-position tool storage, it is extremely user-friendly, designed with the most advanced technical solutions to ensure high working accuracy. Milling is performed while the glass is in a fixed position to achieve better grinding quality and higher grinding speed. The control device combines professional numerical control with the convenience of a PC working in a Microsoft Windows environment. Booth #2232.

03

### Billco MFG

The Z-Series is a premium glass washer and is offered in 70 inches, 96 inches, 110 inches and 132 inches. The Z Series platform is a high-performance glass cleaning system focused on the bottom line. Intelligent maintenance features and high-level process control help to place this washer above others. The Z-Series is engineered to sustain an optimum level of cleaning over years of continuous use and offers easy access to internal components for cleaning, maintenance and minimal downtime. Booth #5064. 724/452-7390 | billco-mfg.com



04

Burkle North America Inc.

Burkle North America Inc. will showcase its Inline Flat Lamination system, which officials call a truly advanced way to laminate glass. Whether in the field of security, sound insulation, building construction or multimedia functionalities, the versatile application of laminated glass has no limits, they say. With the development of inline flat lamination, Burkle is taking this idea further with an autoclave-free process. This innovation enables fast lamination with short cycle times and low energy consumption, with the highest possible quality. Booth #6244.

714/379-5090 | burkleamerica.com

05

ClearShield Technologies

ClearShield Technologies is introducing the ClearPad VPIR-200 vertical pad for the fast application of Ritec ClearShield for protection and maintenance of glass. ClearPad VPIR-200 is the most efficient way of pad-applying Ritec ClearShield. It offers an increased and consistent coverage rate of the glass, and features infrared-reflective pre-heating for faster processing. The system reduces handling, labor costs and application training, and features management and control software to maximize product usage and avoid waste. Booth #7049.

06

### **Diamon-Fusion International**

The FuseCube Express is DFI's newest coating machine that applies Diamon-Fusion protective coating onto both sides of the glass. The coating is applied through a proprietary chemical vapor deposition process, transforming ordinary glass into a high-performing, water-repellent surface. Unique to its class, the FuseCube Express can treat 1 to 5 lites in under 10 minutes and has a minimal footprint (5 by 6 feet) that can meet the demands of both small and larger-sized fabricators. The machine also includes a touch screen monitor, built-in evacuation system, multi-run cartridge system, real-time monitoring, and backup systems, making it simple, reliable and easy to use. Booth #5232. 949/529-3029 | dfisolutions.com

### **GLASSBUILD PRODUCT SHOWCASE**







01

### **Elumatec North America Inc.**

Elumatec will introduce the SBZ118 Profile Machining Center: a compact 3-axis profile machining center with optional 5-sided machining ensures high productivity through precision, ergonomics and customizable equipment options. The new machine combines the functionality of larger models with an extremely compact design of 9.84 feet machining length. Although it requires little space in production, the 3-axis profile machining center offers full functionality for routing, drilling and notching. Booth #5110. 574/273-1790 | elumatec.com

02

### Eastman Machine Co.

Eastman's static table system is capable of cutting, marking and punching virtually any flexible material at speeds of up to 60 inches per second. The static cutting table can process materials like nylon and vinyl as well as difficult-to-cut materials—such as polystrand, p-tex and fiberglass-polyester blends. The system's high-precision configuration features multi-axis motion for more defined and accurate cuts. Material is spread across the static table by an operator or with the use of a pneumatic gripper bar. Booth #6276. 716/856-2200 | eastmancuts.com

03

### Emmegi USA Inc.

The Satellite XTE by Emmegi is a 5-axis CNC mobile gantry machining center, designed to run milling, drilling, threading and cutting processes on large bars in aluminum, PVC, light alloys and steel. The mobile part of the machine mainly consists of a gantry equipped with precision motorization rack. The high-power electrospindle, 15 kilowatts in S1, with HSK-63F tool connection allows heavy-duty machining to be run with speed and accurate results. Booth #5086.





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### THE NEW MILESTONE

Viprotron is proud to add a **new innovation** to its product range at GlassBuild 2022. Our strong focus on defect detection in insulated glass, has steadily expanded over the years to include cutting, fabrication, lamination and finally tempering.

Now we are introducing new, advanced technology for improving tempering defect detection. We will enhance our award-winning Anisotropy + Haze Scanner by adding a **Roller Wave** and **Edge Kink Scanner** to our system. All five functions (Roller Wave/ Edge Kink, Anisotropy, Haze, Brightfield & Reflection Channel for optical defects) are available in one complete package or as individual scanners.

Convince yourself at GlassBuild or contact us now!





### **CONTACT US TODAY**

Viprotron North America Inc.
Cell: (313) 384 3855
Mail: ric.schmidt@viprotron.com
www.viprotron.com

### **DISCOVER THE WORLD OF GLASS**

We can hardly wait to see you again in October at **GlassBuild 2022.** Together with you, we will explore the most exciting new technologies for the high-tech material glass industry.

Take a look at our latest innovations directly on site!





01



NEW NEW

01

### **Erdman Automation Corp.**

Erdman's Vertical Insulating Glass Parallel Process Line derives its name from the innovation of shuttling the topping lite to a back lane. Therefore, the two glass lites run parallel to each other, leading to a significant increase in speed. Compared to traditional IG processes, the line is more ergonomic and has less wasted motion by the operator. There are no manual touches to glass after washer and no close contact between operators. It requires three to four operators, versus seven to nine on a traditional line. The line also includes auto placement of spacer location, and argon is filled and finished on the line. Booth #5194.

763/389-9475 | erdmanautomation.com

02

### Glassline

Glassline will show its Glass Rectangle
Slitting (Strip Cutter). Fabricators that need
to process small lites for applications such as
refrigerator shelves may find it is more costly
and difficult to handle if the raw float glass
comes in small pieces. The Glassline slitting
line allows the glass to be shipped in larger
blanks and slit, or cut down into the smaller
pieces. The line features multiple cutting
heads that score a sheet in a straight line.
The glass is then transferred, and the scores
are snapped. Booth #3081.

419/666-5942 | glassline.com

03

### Hegla

Hegla will exhibit its Hegla-TaiFin tempering furnace. The company is known for convection technology and closely controllable heating zones with qualities much higher than the industry standard, say officials. The optimal bedload is determined with bed optimization from Hegla-Hanic. For maximum automation, the glass can be put together with automated batch creation from Hegla—no operator required. Through "debatching," the batch can be separated again. Booth #6007. 404/905-2878 | hegla.com

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Erdman is your local partner in robotics and automation. We will work with you to innovate and reduce your labor requirements to provide a safer environment at your facility as well as a significant cost savings.

Erdman is unique in that we focus on all facets of window manufacturing and can help you integrate your departments and create a safer, more efficient flow through automation.

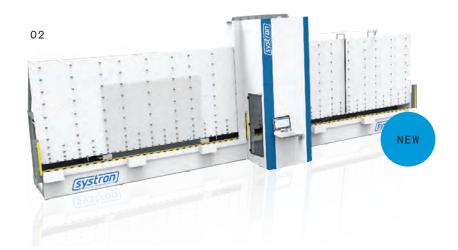
For 29 years we have concentrated completely on the North American market. We started small, service focused, nimble and innovative. We continue that focus today even as we are big enough to handle the largest of projects.

Visit www.erdmanautomation.com or call 763-389-9475 for more information.

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### **GLASSBUILD PRODUCT SHOWCASE**







01

### **HHH Equipment Resources**

HHH Equipment Resources, a division of Salem Fabrication Technologies Group Inc., will introduce Kodiak, an exclusive line of glass edging equipment designed specifically with North American fabricators in mind. Kodiak glass edging machines offer exceptional edge quality, competitive production speeds and a proven track design. The machines are designed for continuous use and the handling of large lites of glass. The robust machines feature heavy-duty frame construction and 77-pound spindles, a long-lasting caterpillar track system, large, user-friendly display screens, automatic lubrication and UL-certified components. Booth #5050.

02

### **IGE Glass Technologies**

The systron proHD is a vertical glass processing center with integrated waterjet technology. The machining of contours and cut-outs can be performed with the highest precision and shortest cycle time due to the solid construction and the use of our patented systems. A barrier-free design and an ergonomic working position enable the operator easy access to all machine components. The processing center is a sophisticated waterjet solution for shower enclosures, all-glass entrances, laminated glass and more. Booth #5218. 561/741-7300 ligesolutions.com

03

### **Jordon Glass**

Jordon Glass will introduce the Eco³Box coolant cleaning system by Filtraglass. The Eco³Box system is a water filtration system that separates and discards floating glass particles found in coolant grind-water and discards them as dried solids in a simple and environmentally friendly way. Eliminating floating glass particles from your coolant water prolongs the life of a machine and ensures that the machine has a constant flow of clean water delivered to the grinding, polishing or milling spindles. Booth #2116.







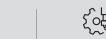




√ Diamond/resin wheels presetting in less than 1 min.



√ Simple to use



√ Reduced machine set-up time



√ Constant quality/
productivity
throughout the day



√ Preventive maintenance



√ Remote management

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### **GLASSBUILD PRODUCT SHOWCASE**



02





01

### Mecal USA Inc.

Mecal's MC312 Taurus 5 Axis Machining Centre is an enclosed 315-inch 5-axis machining center for ultra-high-speed machining of aluminum, steel, brass, copper and PVC materials. The Taurus offers efficiency and productivity. It is on average 30 percent faster than other machines, according to the company, and can be used in numerous applications including windows, doors and curtain walls, automotive, aerospace, engineering, internal partitions, sign manufacturing, air conditioning and refrigeration. Booth #5076.

02

### **PDS IG Equipment**

PDS ProFilm System allows fabricators to protect their glass immediately through a high-speed inline applicator that can maintain insulating glass line speeds. Protective films ensure product cleanliness from factory to finish, reducing potential for damage during manufacturing, and end-of-job cleaning time and costs. The PDS ProFilm System features auto measuring technology and can film more than 1,500 operating-size units per shift. No film trimming is required. A variety of module sizes and film widths are available. Booth #2035.

608/644-8000 | pdsigequipment.com

03

### **Shoham Machinery Ltd.**

Shoham Machinery Ltd. will show pneumatic punch tools for curtain walls, façades, storefronts, entrances, window walls and more. Shoham's punch presses are designed to save valuable processing time by providing a fast and efficient production line. Pneumatic punching is faster than drilling and routing, saving labor time on every punch. The process is operator-friendly, requiring only one operator, and allows for fast and easy assembly. Dimensions and setup can be changed upon customer's request. Booth #3098. +(972) 3679-7600 | shoham-machinery.com



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October 18-20, 2022 | Las Vegas, NV

**BOOTH #5064** 





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01



01

### Walco (Powered by Novacel)

Walco VX2 is a vertical laminator designed specifically for the application of protective film on insulating glass units and flat glass. Fully automated, the VX2 uses technology that allows the application of protective film on both sides of the glass in a single pass, thanks to its automated adjustment system. Equipped with intelligent technology, it is automatically adjusted to the length and height of glass up to 3,000 millimeters. Booth #2052. 909/483-3338 | walcotech.com

02

### Xinglass America

Xinglass developed a new generation of flat and bent glass tempering furnaces, the QX-GTFB3.0. It is the third generation of flat and bent glass tempering furnaces. The machine's arc-changing mechanism uses a precise hydraulic and servo system, and high-quality profiles ensure accurate glass shapes and high arc forming accuracy. The arc-changing system ensures product arc/radius repeatability and high consistency. The new technology of glass positioning and correction has improved the forming accuracy. Booth #4074.

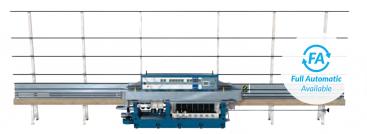


Visit us at Glassbuild America 2022, Booth # 5208

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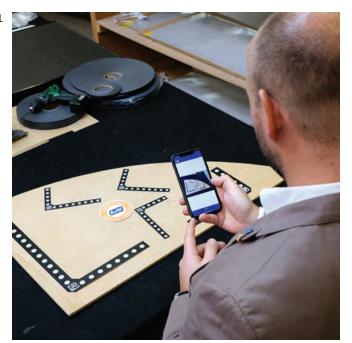




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### **SOFTWARE + SERVICES**

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03



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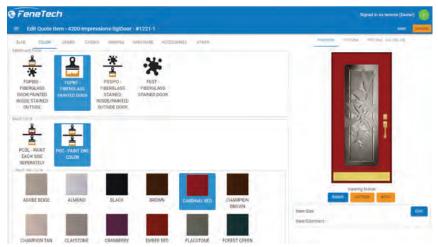
### **A+W Software**

A+W Software's second-generation A+W iShape II allows for quicker fabrication, greater functionality and increased user-friendliness. Users place A+W's reference L-angles inside the template's perimeter. Users can then use the app to photograph the template, calculate data in the cloud, and receive feedback on the template's quality, or a "confidence factor." Users can email the file to A+W CAD Designer, where imperfections can be massaged out with the line tool. Booth # 6136.

02

### FeneTech, A 2020 Company

FeneVision provides users with real-time operational control, insight and agility. Its dynamic bill of materials configurator enables rapid pricing, producing and delivering hundreds or thousands of unique units daily, complete on time, even if users work with seemingly infinite product variations. It connects everything and everyone, including customers' customers. And with ongoing user input, FeneTech continues improving it. Updates include: improved shipping routes with customer-specific filters; mobile-responsive redesign for FeneVision Web; revamped capacity completion logic; and additional flexibility in container tracking. Booth #6096. 330/954-7530 | fenetech.com

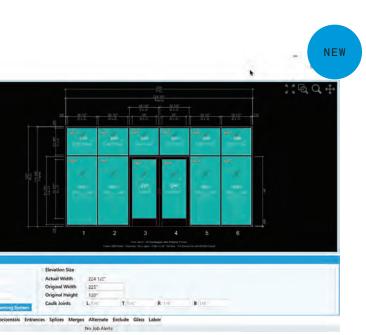


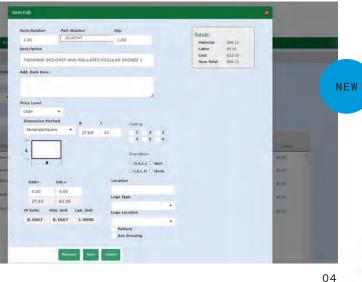
03

### **GDS Estimating**

WinBidPro v16 from GDS Estimating is an all-new estimating program for the commercial glazing industry. The Microsoft Windows application uses a cloud server for all the catalogs and job information. It offers new features, an improved interface and ultimate scalability, which will easily allow the software to grow with the industry. Vendor pricing and product information will be updated without the need to install new catalogs. Booth #9071. 858/538-4375 | gdsestimating.com

02





### **Mainstreet Computers**

Mainstreet Glas-Avenue Cloud Point of Sale business software allows companies to create quotes, measure sheets and purchase orders; then schedule, invoice and manage accounting. Customizable parts with dimensional and per-item pricing ensure consistent, accurate pricing for business owners' insulating glazing units, glass railings, mirrors, tabletops, shower glass and more. Progress billing is also included. Mainstreet's Glas-Avenue simplifies communication with estimators and techs in the field via the Tech App, MobilePro. Booth #7070.

05

### **Prodim USA**

Prodim USA developed a solution for accurate and easy digital measuring for flat or curved glass. Glass fabricators using the Proliner have improved their overall production process by significantly reducing the time required for measuring and creating digital templates for glass structures. Operators can easily create, check and change digital measurements in the factory or on the jobsite, and use the rapidly created DXF files for further processing or as direct input for machinery. Booth #3088.

772/465-4000 | Prodim-systems.com



### Software + Services

01





### **Smart-Builder Glass Software**

Smart-Glass is the brand-new, browser-based, glass design and ordering platform that works on PC, Mac, tablet and mobile phone. Find out how to give your customers a dedicated login to draw, price and order their glass anywhere, anytime. Built-in warnings alert them to mistakes so they can place orders with confidence. The fabricator's team will receive accurate, fabrication-ready glass orders that can be imported into a range of fabrication software systems, such as A+W, Optima, Lisec and Glasstrax. Booth #8152.

628/226-2017 | smart-builder.com

02

### **True Contractor Software**

True is a web-based Enterprise Resource Planning software solution designed for glaziers. It includes tools for managing leads, generating proposals, timekeeping, scheduling, work orders, procurement, inventory control, job costing, invoicing and accounting, while also being fully integrable with any version of QuickBooks. Whether for a residential, field service or commercial contractor, True can help owners take their business to the next level. Booth #8071.

01





October 18-20, 2022 | Las Vegas, NV Booth #8112

# 24/7 Peace of Mind.

HP3 Software identifies and solves customers' workflow challenges with its 24/7 customer care team of personable, knowledgeable experts—providing peace of mind in both daily and urgent situations.

We are known equally for our people as much as our innovative software. We work as true partners with our customers to refine workflow and achieve operational success based on transparent yield calculations and high data integrity. Our support technicians are highly skilled developers that know our products as well as our customers' operations, allowing them to identify and apply best practices for any given situation.

HP3 developers and field technicians—not a customer call center—answer service calls to deliver successful solutions as quickly as possible. Marked by technical knowledge, down-to-earth honesty, easy-to-work-with personalities, and total accessibility,

HP3's support services provide the basis for long term relationships with their customers. Contact us to experience the benefits of being HP3 Customer for yourself.

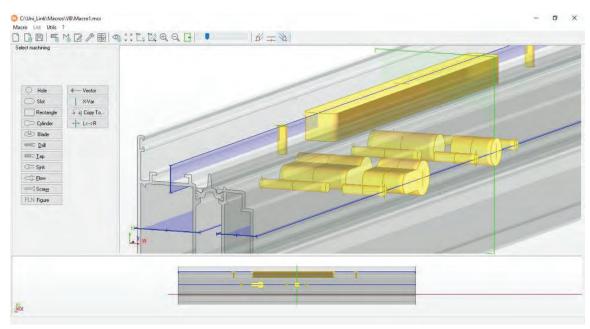
hp3software.com





#### **GLASSBUILD PRODUCT SHOWCASE**

#### Software + Services



01



02

01

#### Uni\_Link Software & Automation USA LLC

Unilink is an independent automation platform for production on CNC machines in the industry for aluminum, steel and PVC profiles used for doors and windows or any other profile industry. The platform includes a machine-independent, vector-based, 3D macro programming interface designed to be user-friendly, fast and capable of managing huge macro libraries. The Unilink platform can import data from any construction software and export to any brand CNC profile milling and cutting machine. Booth #9159. 312/917-6212 | unilinkautomation.com

#### YourRadar.net

02

YourRadar offers commercial and residential glass service businesses an all-in-one solution to automate their business and allow them to operate their glass service businesses more efficiently. It comes with built-in features for sending glass estimates, scheduling jobs, dispatching team members and invoicing customers. Basic glass estimates can be configured for standard window shapes as well as custom designs. Custom designs and the original quote follow from estimate to job completion. Booth #7201. 604/574-7225 | yourradar.net

# All for one, and one for all

Our window, door and glass software solutions are coming together as one at GlassBuild 2022.

Visit our affiliated brands at the following booths to learn more.



Booth 6096

Window and door manufacturers and glass fabricators worldwide use FeneVision ERP software to manage, view and analyze all areas of their operations.

fenetech.com



Booth 6040

Soft Tech provides premium software solutions for the window and door industry to speed up your design process, quoting and manufacturing.

softtech.com



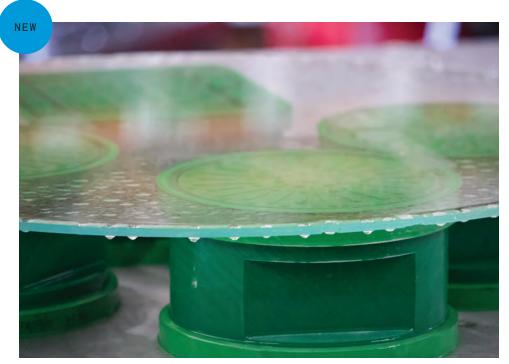
**Booth 9104** 

contractERP is the most comprehensive industry-tailored business management platform available to the division 8, fenestration and construction supply industries.

contracterp.com



#### **TOOLS + SUPPLIES**





03



01



02







#### **Better Vacuum Cups Inc.**

Better Vacuum Cups Inc. will exhibit its SS-R200, the all-new round vacuum cup for all CNC routers. This Better Vacuum Cup comes in three standard heights such as 105 millimeters, 150 mm and 200 mm for the CMS fabricators. Like all BVC cups, this cup does not need the foam gasket to be used. The BVC flexible lip seal mirrors the part for a perfect lip seal, say officials. Booth # 3069. 909/606-0140 | GreenBVC.com

02

#### **EDTM Inc.**

EDTM Inc. The Glass-Chek Elite identifies laminated glass in a window and measures the thickness of the laminate inner-layer. The graphical display illustrates the window's profile. The instrument also detects the presence and location of low-emissivity coatings, and can tell if the coating is a hard or soft coat, as well as the number of silver layers used to make the coating.

419/861-1030 | edtm.com

03

#### Glazelock Inc.

Glazelock Shims Inc. has been a manufacturer of structural plastic shims since 1997. The company was invented by a window installer and aims to develop shims that reduce material and labor costs, while being secure and stable. During the show, the company will promote its pre-scored shims that are easier to break off than traditional wood shims. The shims eliminate the need to cut or to score and are an inexpensive option for companies. Booth #9044. 815/935-5396 | glazelockshims.com

04

#### Magid

Magid's new PPE innovations for glass handling are changing the game to offer the highest levels of protection with unmatched comfort and range of motion. The M-GARD breathable garments are up to 30 percent lighter than competitive products and deliver critical ANSI Cut Level A7-A9 protection at a great value, according to the company. The garments feature AeroDex Technology and integrate new fibers and yarn wrapping techniques to create lighter-weight garments that won't trap heat. Booth #7087.





02

01

#### **Smith Case**

Smith Case has carrying case solutions to best showcase products and components. The cases include precision cut foam inserts to present demonstration tools in an effective yet protective manner. Cases can be designed to hold a range of items for glass industry companies, including heat lamps, insulating glass units, infrared temperature guns, solar power meters, radiometer bulbs, UV lamp and cards, miscellaneous containers, table pads and more. Booth #8104. 336/774-7974 | smithcase.com

02

#### **Tuff-N-Lite**

The Keel Zippered Jacket from Tuff-N-Lite offers an ASTM-1790 cut level 4. The jacket offers easy access with a full front nonmetallic, scratch-resistant zipper, while providing the comfort and breathability of casual clothing. The jacket features orange sleeves for maximum visibility, and a ribbed collar for excellent neck protection. The breathable fabric stretches in any direction for comfort and a full range of motion, while offering superior resistance to lacerations and abrasions. Added wrist guards provide extra security. Booth #8200. 828/322-6975 | tuffnlite.com



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#### **HANDLING + TRANSPORTATION**



01

#### F. Barkow Inc.

Barkow's Model P212-A on a 2023 Isuzu NPR glass carrier has a 12-foot-long by 105-inch-high aluminum, fully welded glazing body. Ten Stake-Loc self-locking stakes are included in the cantilevered metal carrier, with removable bars in center and rear of body. There are B load holding slats throughout, and it is manufactured by craftsmen. The carrier has a 2023 Isuzu NPR chassis cab. 14,500 gross vehicle weight rating, a 6.6-liter gas engine, six-speed automatic transmission, power windows and locks. Booth #8098. 800/558-5580 | barkow.com

02

#### **Ergo Robotic Solutions**

The GM2000-26 is Ergo's tallest robot, reaching up to 26 feet for flush glazing, and up to 28 feet for skylights. It can handle up to 2,000 pounds of glass with ease, all powered by pressure-sensitive wireless hydraulics utilizing our custom Micro Motion technology for extremely delicate maneuvers. It has an electric drive system with numerous safety features and hydraulic manipulations. The boom can extend up to 26 feet vertically, and the head can tilt 180 degrees, rotate 180 degrees, swivel to each side 35 degrees, and side shift 4 inches with powerful and delicate hydraulics. Booth #6054.

518/796-2179 | ergorobotic.com

03

#### MyGlassTruck

The Patriot LT open glass truck body has plenty of capacity but is still easy to maneuver. It can be fitted to a range of cab-over and standard cab-chassis for class three through class five trucks. The Patriot LT is available in 12-foot through 18-foot rack lengths with uninterrupted ledges to accommodate wide sheets of glass. Nine-foot-tall outer racks offer plenty of vertical storage. The interior racks face a roomy platform for walk-in loading, and an optional over-the-cab metal carrier handles all types of storefront channel. Booth #6130. 800/254-3643 | myglasstruck.com

03



**NATIONWIDE GLASS MANIPULATION SPECIALISTS** 

Over 80 years of combined glazing experience

Skyreach Equipment is THE premier aerial equipment and glass manipulation specialist. We strive to provide our customers with solutions to their most challenging projects and glass installations.

Skyreach Equipment takes pride in consulting with architects, building owners, property managers, general contractors and sub-contractors. From the initial site consultation, to creating a plan, coordinating equipment, training operators, to directing the install, Skyreach Equipment goes the extra mile to ensure that each job runs safely and efficiently.

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Telehandlers

· Lifts- Scissor, Single-Man

#### **EQUIPMENT**

- Jekko Mini Cranes
- Atrium Crawlers
- · Boom Lifts
- · Glass Manipulators- Walk Behind, Fork Mounted, Hanging

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#### **GLASSBUILD PRODUCT SHOWCASE**

#### **Handling + Transportation**



01





02

01

#### Smartlift US Inc.

Smartlift's uniquely designed glass lifters allow users to mount windows of any size with ease. The lifters were designed with high-quality materials so that they will last, say officials. Smartlift also offers a variety of accessories, such as suction cups and extension bars, to make the worker's glass lifting job even easier. Booth #7016.

646/877-6455 | smartlift.com

02

#### **SmartGroup**

SmartGroup's new lifts have revolutionized the way glass is installed by improving safety, productivity and functionality for glaziers. SmartGroup's SG450 and the SG650 raise higher (18 feet 6 inches), reach further (11 feet 5 inches), move faster (potentiometer controls desired speed) and lift heavier materials (max 1433 pounds). The lifts are equipped with all-terrain foam filled tires and a visual load cell indicator, making it the safest on the market. The SG lifts are designed to make second story window installation from the ground possible.

03

#### Wood's Powr-Grip Co.

The Jumbo Capacity Curved or Flat Glass Power Rotator / Tilter Vacuum Lifter 5300, Model PRT489CDC3S, has DC-voltage with Intelli-Grip technology and includes an integrated counter-balancer. Other features include: 5,300 pounds capacity; 35 inches of overhang reach; 360-degree power rotation, 90-degree power tilt; 50-inch minimum radius for curved glass loading; and adjustable pad frame for curved loads. This is the largest-capacity lifter manufactured by Wood's Powr-Grip to date. Booth #7064.

406/628-8231 | wpg.com



## **Creating the Highest-Quality Glass Carriers, Since 1879**

F. Barkow Inc. has been an industry leader of glass transportation carriers for 139 years. Our commitment to quality, dependability and craftsmanship goes into every product we manufacture. Decades later, we continue to produce the highest-performing glass carriers in the industry.

Transporting your precious cargo safely is our priority. Barkow glass racks come equipped with our exclusive glass-holding system featuring Barkleats™, Barpads® and Baseplate Pads, as well as Stake-Loc® self-locking stakes for added safety. We offer a wide range of glass transportation carriers from cargo vans and pickup trucks all the way up to semi-trucks and trailers. Each custom-made glass rack is fully-welded in your choice of aluminum, stainless steel or high-tensile steel. Trust F. Barkow Inc. for quality, innovation and service.

See us at GlassBuild America, booth 8098.



CHAPTER

# 02

## **GLASS + COMPONENTS**

#### **TRENDING**

LARGER SIZES // VALUE ADDED // HIGHER PERFORMANCE

Leading glass and glazing design trends are larger sizes and systems with minimal framing, allowing for cleaner sightlines with fewer interruptions, according to exhibitors.

"For quite some time we have seen the demand for larger clear views of glass, fewer intermediate framing members," says Tim Nass, vice president of sales, for exhibitor Safti First. "We are seeing an increased demand for low-iron products that maximize clarity for both interior and exterior projects."

Additional trends include new possibilities in decorative products, high energy and thermal performance glasses and components, security and impact products, bird-friendly glasses, and other value-added solutions. These products and more will all take center stage at Glass-Build, say exhibitors.



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01

### Ensinger - insulbar North America

Ensinger - insulbar thermal break profiles are a vital component of modern window, door or façade systems made of metal. They eliminate thermal bridging between interior and exterior surfaces, improving overall performance of the system and reducing energy loss, according to company officials. The insulating profiles are available in many shapes, sizes and materials to meet even the most complex requirements. Booth #9087.

02

#### GGI

Zebrano Wood Grain Designs have been added to GGI's Alice Direct to Glass Ready-to-Print collection, offering architects and designers a superior alternative to natural wood. Zebrano Expresso, Macchiato, Chocolate and Mocachino provide the aesthetic of natural wood but without the sanding, straining and ongoing maintenance required. The ceramic frit application makes it ideal for interior or exterior applications. The scale, color and opacity can be customized for a one-of-a-kind finish on an ultra-clear low-iron glass or low-iron, satin-etched substrate for an easy-to-clean, durable surface material. Booth #6124. 201/553-1850 | generalglass.com

03

#### Glassopolis

Protect-X is the latest addition to the Protect lineup of protective glazing from Glassopolis. Protect-X is a specialty glass that protects against X-rays and radiation. It's used in medical and security scanning facilities, and it is available in several different safety formats, including filmed and laminated, and can be tailored to the customer's exact needs. From Glassopolis, it's in stock and available for quick shipment. Booth #7132.









#### **Global Security Glazing**

Childgard is laminated glass constructed with a state-of-the art proprietary security interlayer built to withstand extensive physical attack during a forced-entry scenario. It provides the aesthetics and daylighting advantages of glass, with an additional level of security. Childgard is tested to nationally recognized detention standards ASTM F1233-08 and meets safety glazing standards. It can be installed in industry standard doors, framing and window systems for retrofit or new construction. The product provides security while optimizing daylight. Booth #8208.

724/712-4555 | security-glazing.com

05

#### **Guardian Glass**

Guardian SunGuard SNR 35 coated glass provides a low solar heat gain, a neutral silver appearance and stunning neutral reflectivity. SNR 35 delivers a crisp, reflective look and features a lower solar heat gain coefficient of 0.17 for energy saving performance. By combining the classical, neutral aesthetic both at normal and angular incidence with superior energy performance, SNR 35 presents an attractive exterior architects seek while helping to provide bright, comfortable interiors, say officials. Booth #6194.

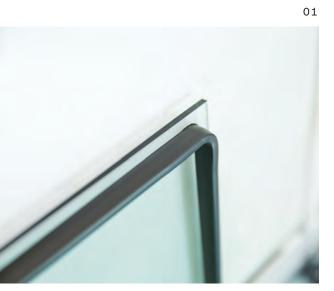
248/340-2141 | guardianglass.com

06

## Hans Building Material Technology Co.

Blinds Between Glass from Hans is a renovation product which is widely used in doors and windows as an energy-efficient replacement for insulating glass. Compared with traditional insulating glass and window blinds, BBG products combine the glass and blinds as one, say official, installing aluminum mini blinds inside a sealed IG unit. Two kinds of operating systems are available to control the blinds for windows or doors: manual or motorized. Booth #8123.

#### **GLASSBUILD PRODUCT SHOWCASE**





01

#### H.B. Fuller

H.B. Fuller's Ködispace 4SG warm-edge spacer system is the premier solution for both commercial and residential applications, say officials. The product's formulation chemically bonds to glass and silicone secondary sealant. There is no spacer migration, and it has a higher temperature stability than standard insulating glass with polyisobutylene, in addition to an increased resistance to incompatible glazing conditions, say officials. The product is currently the only reactive thermoplastic spacer system available, officials say. Booth #7093.

812/449-9567 | hbfuller.com

#### Interlayer Solutions

02

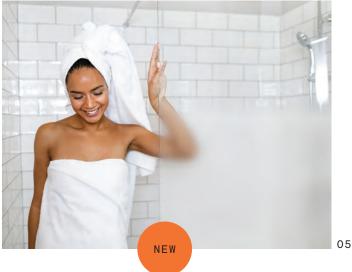
Evalayer by Interlayer Solutions Inc. is a full cross-linked thermoset EVA specially designed for the glass lamination industry. Properly processed, Evalayer offers crystal clear results, excellent soundproofing, and high resistance to moisture, UV rays and impacts. Evalayer could be used in several outdoors and indoors glass lamination applications such as: open edge (frameless), decorative, soundproof, fire-rated, switchable, high impact resistant, medical laminated glass and more. Booth #6264.

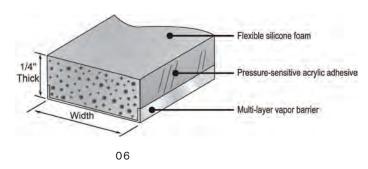
Quanex

03

Quanex's Super Spacer warm-edge technology is used in energy-efficient window designs in residential and commercial applications. Super Spacer is a premium energy-efficient and sustainable solution for high-volume production of dual- and triple-pane insulating glass. A true dual-seal warm-edge spacer line, Super Spacer products use a high-performance acrylic adhesive for their structural seal, backed by a moisture vapor seal. Super Spacer offers energy efficiency, sustainability, and has demonstrated proof of performance, reliability and thermal excellence, say officials. Booth #7026. 740/439-6429 | quanex.com







## Safti First Fire Rated Glazing Solutions

Safti First will show the patent-pending, panelized SAFTI-EZ-ARC, designed for use in non-rated or fire-rated applications. SAFTI-EZ-ARC is the first U.S.-made, truly panelized, versatile structurally glazed curtain wall system. Two versions were developed to satisfy non-rated and fire-rated applications: SAFTI-EZ-ARC is a unique panelized system that will provide ease of installation in a curtain wall, while the SAFTI-EZ-ARC-FR is an ASTM E-119/UL 263 fire-resistive rated version recently successfully tested and listed by UL up to 2 hours. Additional testing is scheduled to meet hurricane, blast and tornado requirements. Booth #8065. 415/230-6758 | safti.com

05

#### Sevasa

Sevasa launched Graduel-H, glass with acid-etched gradual opacity, now in a horizontal format. The product's gradient from translucent to transparent runs parallel to the short side of the sheet, which measures 88 inches or 94 ½ inches. This allows for better fabrication with less waste, say officials. The glass also doesn't show fingerprints, and has high resistance to scratches and stains in the treated, translucent area. Applications include public spaces and high-traffic areas. Booth #8070. +(34) 9382-8033-3 | sevasa.com

06

#### Strybuc Industries

A flexible, silicone foam spacer product, Super Spacer provides the maximum perimeter insulation for sealed glazing units and prevents condensation. Desiccant-filled with pre-applied side adhesive, the structural foam spacer significantly simplifies insulating glass production, say officials. Featuring a vapor barrier backing, the product must be used in combination with conventional IG sealants such as hot melt butyl, polyure-thane and solvent-free polysulfide. Dual seal equivalent sealants may also be used. Booth #9038. 610/534-3200 | strybuc.com





01

#### SWM International

SWM International's diverse Argotec interlayer film product line is custom-engineered to offer precision extrusions for a variety of glass lamination applications. SWM films feature optical clarity, hot and cold characteristics and offer high overall quality in the glass lamination industry. The product is custom engineered from copolymer resin and is used as an interlayer sandwiched between two pieces of glass or plastic sheet, and is ideal for use in smart glass applications like privacy for conference rooms. Booth #8044.

02

#### Ultrafab Inc.

Ultrafab will introduce its Ultra Cell MicroCellular Foam Seals that feature new technology that offers improved overall performance. The innovative product from the Ultrafab team leads the industry in compression set resistance, weatherability and color stability, according to company officials. The thermoplastic foamed interior of the seal also provides consistent low closing forces that can be tailored to users' application needs. Booth #7112.585/924-2186 | ultrafab.com





#### Vip Rubber Co.

Vip will promote the company's decades of experience manufacturing thousands of unique custom plastic extrusions in almost every shape, size and color. The company's specialty lies in making plastic profiles specifically for window and glass applications. Its capabilities range from very complex, custom-made parts and profiles to simple, more common and standard shapes. Vip makes its dies in-house, so it has the flexibility to create brand-new parts when customers are ready to order. Booth #8174.

562/905-3456 | viprubber.com

04

#### **Vitro Architectural Glass**

VacuMax vacuum insulating glass by Vitro Architectural Glass integrates with any traditional, and even non-traditional, glazing system to maximize insulation performance. The product delivers an R-value of R14, close to that of a traditional wall. VacuMax VIG units consist of two lites of 4-millimeter glass separated by a non-leaded proprietary metal seal and a vacuum space. The unit's slim construction and light weight allow it to be incorporated into virtually any traditional glazing system, window frame or curtain wall application. Booth #6064.

412/820-8138 | vitroglazings.com

CHAPTER



# METALS, SYSTEMS + HARDWARE

#### TRENDING

HIGH-PERFORMANCE // BUILT FOR LARGER SIZES // EASY-TO-INSTALL

The leading trends in glass and components—larger sizes, higher performance, additional security—are similarly evident in the trends for metals, systems and hardware. During GlassBuild, companies will be exhibiting glazing systems that meet tougher energy- and thermal-performance requirements. They will be showing windows and doors capable of handling larger, heavier glasses. And they

will introduce products that will stand up better to threats, from hurricanes to intruders.

Additionally, suppliers are focused on developing systems that provide straightforward, efficient installation to help with the labor shortage, and products that provide ease of use for the end user.

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#### **GLASSBUILD PRODUCT SHOWCASE**



01 02

#### Akotherm Aluminium-Profilsysteme

Economic and demonstrably excellent, the AT 740 window offers product quality with all the benefits one expects from a "state of the art" aluminum window. Burglar resistance up to RC3, sound protection and excellent insulation in compliance with the latest Energy Saving Ordinance can be implemented with the system. Booth #8124. 917/734-8169 | akotherm.de

#### **Anthony Innovations**

For heavyweight architectural window and door panels, it's important to have a roller that not only handles the weight, but also functions with ease. The 9000 Series rollers from Anthony Innovations can handle even the biggest panels. The system can manage loads up to 800 pounds. It features wheels available in stainless steel and in CNC-machined polymer material. A single-bogie carriage offers balanced load distribution and smoother glide, and customizable mounting tabs and spacers make it easy to adapt different existing systems. Booth #10078.

#### **Caldwell Manufacturing**

03

Caldwell Manufacturing will promote
Enginuity, a patented system for hung
or slider windows and patio doors that
features a sleek, concealed design that fits
completely in the top track of the patio door.
The Enginuity patented system can also be
nestled in the side jamb or a compact design
attached to the lift rail of the hung window.
The Enginuity actuator can be on either side
and adapted to any desired travel length,
from 4 inches or less to fully open. Booth
#6046. 585/352-2870 | caldwellmfgco.com

02



Door Controls USA
HARDWARE CATALOG

04

#### **CRL**

No two projects are the same when it comes to energy-efficient design. That's why the CRL 8010 Series Single Blade Sunshade offers flexibility in managing solar exposure and building envelope aesthetics. Blade angles can be adjusted from 0 to -35 degrees in 5-degree intervals with specialized brackets that attach to storefront and curtain wall frames. This unique feature delivers a sunshade system that can be tailored to a building's geographical location. The 8010 Series Single Blade Sunshade enhances aesthetics as it does solar protection. Airfoil or rectangular styles are available for improved visual compatibility. Booth #6152. 323/588-1281 | crlaurence.com

05

#### **Deceuninck North America**

05

Made from a revolutionary fiber-reinforced polymer, Deceuninck's Innergy Architectural Products deliver both structural strength and thermal performance. The systems can improve the thermal performance of commercial windows, doors, curtain wall and storefront systems without the need for a complete redesign. Innergy AP parts are custom designed to fit existing commercial fenestration products and include pressure plates, structural thermal struts, reinforcements and curtain wall components. The offering builds from Deceuninck's Innergy Rigid Thermal Reinforcements already used in window and door frame chambers for enhanced energy efficiency. Booth #8004. 513/539-5505 | DeceuninckNA.com

06

04

#### **Door Controls USA**

Door Controls USA will introduce its new hardware catalog, which features over 30 brands and more than 600 parts. Customers will find the newest trends in automatic and manual door hardware ready to ship from one of our three warehouses. At the Door Controls booth at GlassBuild America, attendees can receive a free copy of the catalog and enter for a chance to win a DC700 Low Energy Swing Door Operator or \$1,000 in DCM hardware. Booth #9016.

06



01

## FHC Frameless Hardware Company LLC

FHC will highlight its Aspire Thermally Broken Insulated Glass Door Entrance System along with the "VDS" Vertical Door Stile System. These new products bring next-level industry standards to air, water infiltration management and thermal performance, meeting the nation's ever-evolving energy and building codes. Features include: thermally broken door rails and vertical door stiles utilizing polyamide strut thermal barriers; door handle hardware connects directly to the glass; narrow vertical door stiles with a unique clamping mechanism with unitizing gaskets for fast, durable installations; and more. Booth #6016. 323/336-8307 | fhc-usa.com

Ideal Glass Hardware Inc.

02

Ideal Glass Hardware introduced its new hydraulic Smpl-Door Rail system. The innovative door rail combines the strength and durability of the company's 4-inch door rails with the simplicity of its ICFH100 Bottom Hydraulic Door Closers. The product requires no digging or cutting of the floor: installation is quick and easy with just four fasteners. The base seat is adjustable: 3 millimeters backward and forward, 3 mm left and right and 4-degree alignment adjustment. Booth #8129. 905/940-1363 | iglasshardware.com

03

#### Kenwa Trading Corp.

Kenwa Trading Corp.'s NHN PDC100 Patch Fitting Pivot Door Closer is the first in the flagship range from Kenwa-NHN's next generation of glass door closers. Incorporating the latest cam type technology, the NHN PDC100 patch fitting pivot door closer offers easy opening with increased efficiency on the closing torque. The product is double-acting, narrow style with high performance, available with or without hold open function. The bottom part mounts on the floor surface without a need for preparing digging/cavity. Booth #9042.

516/933-6016 | kenwa-america.com

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#### **GLASSBUILD PRODUCT SHOWCASE**





03

01

#### **Kich Architectural Products**

Kich Architectural Products will promote its door pulls, lever handles, handles, door hardware, cabinet hardware, glass door hardware and railings. The pull handles are crafted with AISI 316 Grade SS and high-grade brass bushings to incorporate more threads and grip, while its lever handles are made with standard specifications, so that any make of standard mortise lock can be used with the handles. Meanwhile, the Kich railing systems offer enduring designs and finishing that adds a luxurious touch to the premises. Booth #9074. 800/212-3638 | kichindia.com

02

#### Linetec

Linetec's specialty wood grain coatings for aluminum provide the benefits of metal with the biophilic beauty of natural wood. Choose from more than 50 wood grain species and colors, along with textured grain patterns. Ensuring a durable surface that retains its color and gloss, Linetec's Class 2, 2+ and 2.5+ powder coating process meets or exceeds the AAMA 2604 specification. The finishes for aluminum mimic the aesthetic of real wood without swelling, rotting or warping. Booth #9013. 715/843-4100 | linetec.com

03

#### **Q-Railing North America**

Easy Alu from Q-Railing offers all the benefits of a high-grade aluminum railing. This system provides fast installation with the option to pre-assemble components into complete railing sections in the comfort of the workshop. Customers can get on and off the construction sites by ordering "ready-to-install modules," custom-made to their specifications. Booth #7046.

714/259-1372 | q-railing.com



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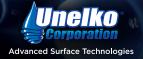
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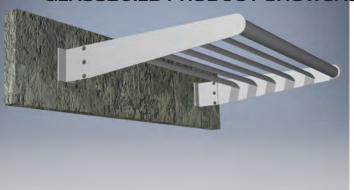


NANOVEA® SpecLink





Contact Unelko Corporation for a Fabricator or Distributor Near You. 1.800.528.3149 | www.GlassCareExperts.com | www.Unelko.com





01

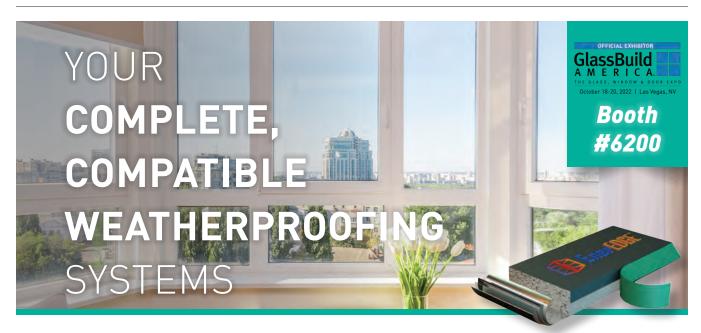
#### **SAF**

SAF Sun Control Systems reduce solar heat gain and control glare to allow a designer to optimize use of natural sunlight, reduce energy consumption and create a more comfortable environment for occupants. The system includes air foils and fascia that are made from 6063-T6 aluminum alloy and brackets made from 6061-T6 aluminum alloy. Air foils are available in 4-, 6- and 8-inch variations. Blade configurations can vary and be custom-designed based on the desired amount of sun control. Blade angles can be adjusted for geographic locations or orientation. Booth #6071. 800/241-7429 | saf.com

02

#### **Security Door Controls**

Security Door Control's Auto EntryControl Door Operator provides hands-free door control to help meet U.S. and Canadian ADA requirements for door installations in retail storefronts, office buildings, campuses and health care facilities. A built-in 1-Amp+, 24 volts DC internal power supply provides integration with other electrified hardware without adding a power supply. A fixed mounting bolt and pre-drilled mounting holes allow for single-technician installs. The product is built with a state-of-the-art microprocessor-based unit that is self-tuning and self-learning. Booth #8045. 805/494-0622 | sdcsecurity.com



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Exhibitor list as of Aug. 15. Visit GlassBuildAmerica.com for the most up-to-date listings.

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6136	A+W Software
9118	Access Hardware Supply
9104	AccessIT
8172	Accurate Lock and Hardware
9068	Addev Materials
5104	Adelio Lattuada S.r.l.
10098	Adhesives Research Inc.

воотн	COMPANY NAME
6186	ADI Srl / IGP Inc.
2049	Advanced Screen Systems Inc.
2046	Akarmak
8124	Akotherm Aluminium- Profilsysteme
9132	Alloy Fasteners Inc.
9046	AllYourHardware.com
7200	Alumax Bath Enclosures

воотн	COMPANY NAME
4064	Aluro
5266	Ameri-Can Machinery
5998	American Renolit Corp
8029	AmesburyTruth
8132	AMJ Houses LLC
10078	Anthony Innovations (NA), LLC
9009	Apex Construction Supplies





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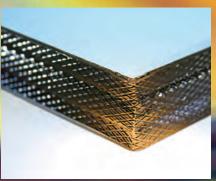
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9004	Arcadia Inc.
8154	Argon Filling Systems, Inc.
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9136	Arizona Shower Door, Inc.
8069	Arkema, Inc.
10124	Asas Aluminium AS
2089	Ascentium Capital
7124	Assa Abloy Opening Solutions
9085	Atas International Inc.
5280	ATech Machine Inc.
3118	AutoMak Assembly Inc.
2040	Bailey Specialty Cranes & Aerials
7065	Banner Solutions
1051	Baberán S.A.
2232	Bavelloni America Inc.

воотн	COMPANY NAME
2091	Beijing Hanjiang Automatic Glass Machine Equipment Co., Ltd.
8020	Beijing Lead-Top International Fair Co., Ltd
8024	Beijing Northtech Glass Co., Ltd.
6270	Benteler Maschinenbau GmbH
8107	BidClips
5064	Billco Mfg. Inc.
7165	Blink Blinds + Glass
2033	Bondtech Corp.
5208	Bovone North America
6174	Bottero Flat Glass, Inc.
9022	British Pavilion
4232	Bromer Inc.
6244	Burkle North America Inc.
3069	BVC Group Inc. (Better Vacuum Cups Inc.)

воотн	COMPANY NAME
8127	C2A Longterm Inc.
9153	CAD-PLAN GmbH
6046	Caldwell Manufacturing
4070	Cardinal Paint and Powder
6232	Casso-Solar Technologies LLC
7040	Chelsea Building Products Inc.
7049	ClearShield Technologies
8119	Cline Aluminum Doors Inc.
5040	CMS North America
9105	Colour Alliance Inc.
8106	CompanyCam
6074	Continental
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7208	CoolTemper USA
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8064	Creative Millwork of Ohio Inc.
8197	Crimsafe North America
6152	CRL
4245	Datum Automation
8118	Decco Extrusion
8004	Deceuninck North America
9158	Define Overseas Pvt. Ltd.
5176	DeGorter Inc.
7178	Deltamax Automazione
6214	Deltarack USA & Leading Edge
5254	DeMichele Group
5232	Diamon-Fusion International
3183	Diamant SAS

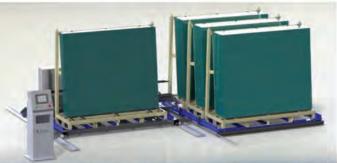
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5238	Didion Autoclave
2115	Door & Window Market (DWM) Magazine
6238	Door Controls USA Inc.
10064	dormakaba USA Inc.
7173	Dow
9093	Dreamwalls Innovative Glass Products
9017	Dri-Design Inc.
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2119	Edda Pack
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7197	Elliott Manufacturing
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9087	Ensinger - insulbar North America
8128	Erd Metal
5194	Erdman Automation Corp.
6054	Ergo Robotic Solutions
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5002	FOM USA
3064	Forel S.p.A. / Forel North America
7125	Fornax Door and Window Accessories
6136	Friedman Corporation
6074	FUX Maschinenbau und Kunststofftechnik Gmbh
9071	GDS Estimating
2010	GED Integrated Solutions Inc. & Norfield
8077	Genius Retractable Screens
6124	GGI
6077	Glass Coatings and Concepts

воотн	COMPANY NAME
7184	Glass Company
3054	Glass Machinery Direct
1172	Glass Magazine
10100	Glass Vice
7196	Glasslam
3081	Glassline Corp
7132	Glassopolis
7203	Glass-Technology International
8067	GlassTrax & Glaziers Online
6112	Glaston America
8047	GlasWeld Scratch Removal
9044	Glazelock Inc.
8208	Global Security Glazing
7025	Goldstar Co., Ltd.
9120	Gonzato Group CA Inc.

воотн	COMPANY NAME
9023	Grabo / Nemo Power Tools
2020	Graf Industries Inc.
9076	Grove Structural Shims
4026	Groves Incorporated
6194	Guardian Glass
7021	Guizhou Golden Ocean Trading Co., Ltd.
8165	Gulf Rubber Industries LLC
8180	Gunther Mirror Mastics
9072	Gutmann North America
9072	Gutmann Orama
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3185	Horizon SRLS
8112	HP3 Software Inc.
2056	Hub Industrial an Applied MSS Co.
6250	HydAway Hydraulic Walls
8075	Hydro Extrusions North America
7130	Hygrade Components
9160	IC Complex
6222	ICD High Performance Coatings + Chemistries
8129	Ideal Glass Hardware
5218	IGE Glass Technologies

воотн	COMPANY NAME
9194	IGK North America
8196	Infinite Recycled Technologies
9055	Infor (US) LLC
9091	iNoex LLC
4152	Integrated Automation Systems
6258	Interglass
6264	Interlayer Solutions Inc.
6104	Interlock USA
3124	Intermac America
6219	International Union of Painters and Allied Trades
9029	Intertek
7174	Italcarrelli S.r.l.
6180	Italian Trade Agency (ITA)
9117	JEI Structural Engineering Calculations & Design Assist

воотн	COMPANY NAME
3104	Jekko USA
7023	Jinan Wondec Machinery Co., Ltd
8005	JLM Wholesale
3028	Joe's Refrigeration, Inc. / Clean Room Solutions
7205	Jordahl USA Inc.
2116	Jordon Glass Machinery
2244	Joseph Machine Co
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5182	La Tecnica Nel Vetro
2101	LaPel Solutions
9053	Larson Engineering Inc.
9013	Linetec
9164	Linkan North America LLC
5018	Lisec America Inc.
7104	LiteSentry - Softsolution
7133	Longhorn Architectural Products LLC
8164	M3 Glass Technologies
3224	Machines and Wheels Inc.
4182	Macotec S.r.l.
7087	Magid
7070	Mainstreet Computers LLC

воотн	COMPANY NAME
7069	Mapes Panels
5186	Mappi America Inc.
7212	Marine Fasteners, Inc.
5124	Matodi USA
9113	Maxest Industrial Inc / McThermo LLC
6172	Mazzaroppi Engineering S.r.l.
9031	Mbs Standoffs
9012	McKeegan Equipment
5076	Mecal USA Inc.
8038	Millet Glass Industry
4190	Mole Moreschi S.r.l.
9201	Morse Architectural
1172	MyGlassClass
6130	MyGlassTruck

воотн	COMPANY NAME
1172	National Glass Association (NGA)
4184	Nordwall
6207	North American Contractor Certification (NACC)
7076	Novagard
8074	NuCoat North America LLC
8193	Oceanside Glass & Tile
3112	Oemme S.p.A.
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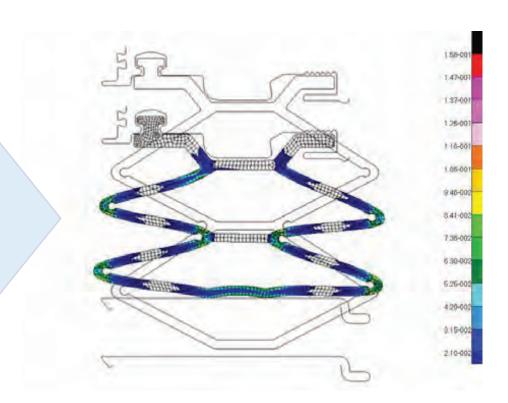
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3040	Pat Mooney Saws
2035	PDS IG Equipment LLC
10198	Preference North America, Inc.
3032	Perfect Score Technologies
4218	Pertici North America
9112	PH Tech Inc.
6136	PMC Software
8168	Podium
8212	Polaris Soft Close Hinge
9043	Polytronix Inc.
9108	PRL Aluminum
9109	PRL Glass
9168	Process Label Systems Inc.

воотн	COMPANY NAME
3088	Prodim USA
8204	Profile Wrapping- Diversified Mfg of CA, DMOC Inc.
7046	Q-railing - North America
7199	Quan Dat Aluminium Fascade
7026	Quanex
5028	Quattrolifts USA Ltd.
4249	Quick Fabrication
8009	RA Workshop Software
9184	RACO Interior Products
7179	Radisson Industries
7209	Reed Rubber Products
9080	Reliable Products
8016	Rider Glass Co. Ltd.
6221	Riot Glass Inc.
6079	RiteScreen

воотн	COMPANY NAME
7045	Rockwell Security Inc.
6071	SAF
8065	Safti First Fire Rated Glazing Solutions
5050	Salem Fabrication Supplies and HHH Equipment Resources
6118	Satinal USA Inc.
8192	SBMS Group Inc.
5176	Schiatti Angelo S.r.l.
7172	Schiavo Glass Machinery SGM S.r.l.
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8051	Schlegel PolyFab
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8131	SilGuard by Inverge
6184	SKG SRL - Skill Glass, S.r.l.
9099	Sky Building Products
2099	Skyreach Equipment
7016	Smart Lift US Inc.
7206	Smart Logistics
8152	Smart-Builder Glass Software
2097	SmartGroup America
8104	Smith Case
6040	Soft Tech Group
3056	Southern Stretch Forming
8080	SPH Global / Protectapeel
10046	Spider by BrandSafway

воотн	COMPANY NAME
8081	Stainless Structurals America
8046	Stretch Solutions
9038	Strybuc Industries
9035	Stylex Windows & Doors
8184	Sullivan Hardware
3050	Sun 3D Corporation
7017	Sun Design Hardware Factory Ltd.
7017	Sun Design Plus Limited
9021	Sunbelt Business Advisors
9107	Surface Armor
8044	SWM International
3067	SynergX Technologies Inc.
8080	TBP Converting
8105	Techno Rubber Industries
9037	Techno-UMG America

воотн	COMPANY NAME
3209	Tenon Beijing Equipment - TSS Sales & Service
9041	Top Notch Distribution
10200	Tower Sealants
6200	Tremco Construction Products Group
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3065	Trucent
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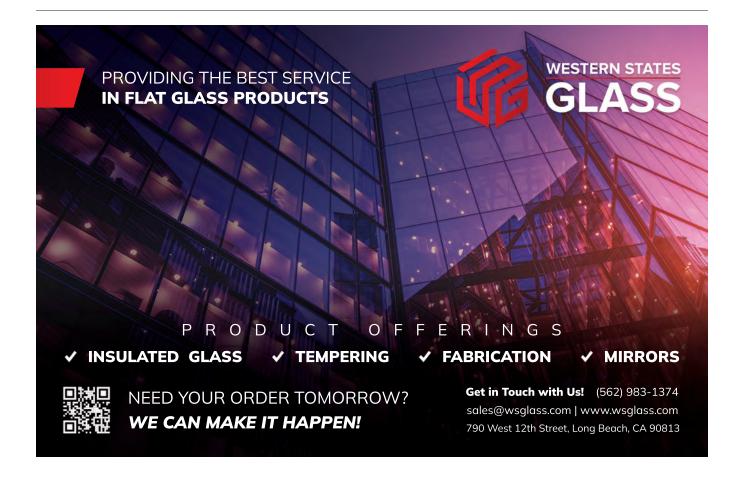
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8054	Unruh Fab Inc.
3092	US Centrifuge
2113	USGlass Magazine
6084	VEKA North America
7129	Vesuvius
9121	Vicone High Performance Rubber Inc.
8174	Vip Rubber Company
5242	Viprotron North America Inc.
6206	Vision Hardware Inc.
6064	Vitro Architectural Glass
7180	Vitrum S.r.l GIMAV

воотн	COMPANY NAME
7080	Wagner Companies
3150	Wakefield Equipment
2052	Walco (Powered by Novacel)
9054	Walker Glass Company Ltd.
9007	Walter A Wood Supply Co.
4239	Water Treatment Solutions
2026	Weldco Sales Inc.
8020	Welland Hardware Manufacturing Co. Ltd.
8167	Wesco Anixter
1172	Window + Door
9157	Windowmaker Software
7136	Winlet
4032	Winpro
6136	Winsys

воотн	COMPANY NAME
8023	Wintek by The Georgian Bar Company Ltd.
8011	Witte North America
7064	Wood's Powr-Grip Co. Inc.
9050	Wrisco Industries Inc.
4074	Xinglass America
7201	YourRadar
3218	Yuntong Glass USA
8201	Zone Import Inc.





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01 02



### 01. Decorative glass

General Glass International added a new decorative glass solution to its line of textured patterned solutions. Stylos S is an engraved glass solution with a vertical design that offers visual interest, privacy and high visible light transmission. This new solution will be available in 1/2inch thick, 88.5 inches by 126 inches. Stylos S clear, low-iron and tinted in 4, 5, 6, 8, 10 and 12 millimeters will be available for special orders. 800/431-2042 | GENERALGLASS.COM

### 02. Ceramic enamel

Glass Coatings and Concepts introduced a new product line called EX Series Surface One Ceramic Enamel. This product contains an engineered frit design for surface one application. It gives building architects unique tools to create new decorative glass designs. They are designed to be screen printed and are delivered ready-to-use. Side 1 is the preferred position for bird-friendly glass patterns, where visual markers have tested most effective in deterring bird-to-glass collisions, say company officials.

513/539-5300 | GCCONCEPTS.COM

### 03. Kneepads

Brass Knuckle's new light-duty and heavy-duty kneepads are manufactured to help reduce the risk of injury and minimize joint fatigue. Designed for those who spend time working on their knees, like flooring installation and roof work, these kneepads provide additional comfort at work while helping extend careers. The BKKN100 Light-Duty kneepads come with a single adjustable strap for hours of lightweight comfort. The Heavy-Duty kneepads provide all-day, high-level protection with a hard, contoured cap. 770/674-8930 | BRASSKNUCKLEPROTECTION.COM

### 04. Safety gloves

Magid's RepTek Grip silicone palm-coated gloves provide adhesion resistance, paired with high cut resistance and dexterity. For window manufacturers, these gloves are manufactured to make workers' lives easier while keeping them safe and comfortable in hot and dangerous environments. The GPD487 features a Hyperon ANSI cut level A5 shell, and the GPD787 uses Magid's AeroDex Technology to achieve cut level A7 protection, but both options are cool and lightweight, providing long-wearing cut resistance.

800/867-1083 | MAGIDGLOVE.COM

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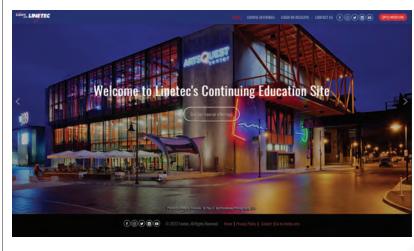
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01



### 01. Video course

Linetec added a new online, on-demand video continuing education course to its website. The new course, "Architectural Design Opportunities: Utilizing High-Performance Coatings," joins "Architectural Coatings: Weathering, Performance and Application of High-Performance Coatings" as an approved American Institute of Architects Continuing Education Series presentation. Those who successfully complete both of Linetec's one-hour, self-guided courses can earn up to 2.0 Learning Units.

715/843-4100 | LINETEC.COM

### 02. Design tool

Vitro Architectural Glass launched
VitroSphere Digital Glass Simulator,
a new virtual tool for visualizing
architectural glass, at thevitrosphere.
com. Developed for architects, this tool
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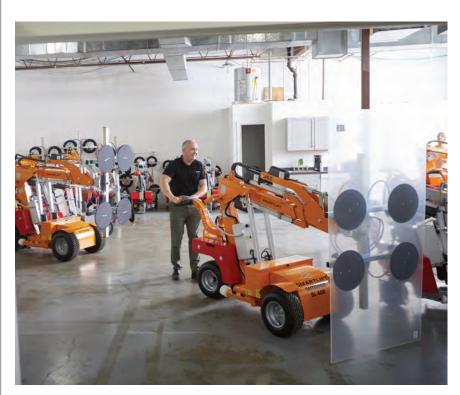




03

### 03. Hardware catalog

The Frameless Hardware Co. published the FSH24 Frameless Shower Door Hardware and Supplies Catalog.
The catalog showcases the latest selection of products designed to please designers and homeowners, while also helping grow glass and glazing companies. The 176 pages include professional-grade shower door hardware and trusted industry standards spanning shower door hinges, handles, pulls, glass clamps, U-channels, sliding kits, installation tools, supplies, accessories and more.



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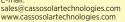
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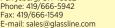
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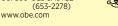
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Companies from all parts of the glass and glazing industry have implemented innovative, out-of-the-box ideas to improve business from the ground up. Here's an Idea showcases these sometimes small behind-the-scenes ideas that can make a big impact on a company's bottom line. If you have an idea that you would like to share, contact Norah Dick, ndick@glass.org.

# STARTING THE CONVERSATION ON MENTAL HEALTH IN CONSTRUCTION

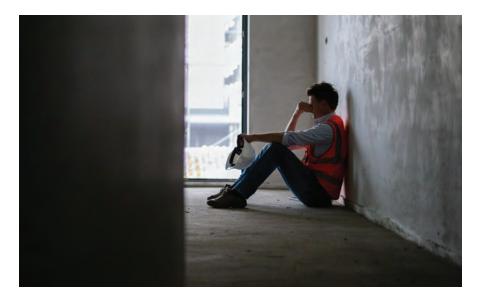
ealth is certainly an issue on everyone's minds as we enter a different phase of the COVID-19 pandemic, but mental health remains a taboo topic for many, including those in the construction industry.

Speaking on mental health in the industry, Chris Gardner, president of the Independent Contractors and Businesses Association, based in British Columbia in Canada, shared insights with the audience at the Fenestration & Glazing Industry Alliance Virtual Annual Conference about the stakes of mental health and how to treat it. ICBA enrolls 125,000 people in its health and dental plans, which, along with a user survey, gives the organizations some insights on industry workers' relationship to mental health.

Here are a few takeaways from the conversation, part of the presentation "Impacts of Mental Health and Substance Use in the Construction Industry."

# Why is mental health difficult to treat?

It may seem obvious, but mental health challenges can be invisible to those around a person. "When you have a physical injury, you can see it and people know what to do. The challenge with mental health is that we can't see it, and what we can't see is much harder to treat," says Gardner.



Mental health issues also have a long history of stigmatization. "In the previous generation, people were ostracized, viewed as not fit, even institutionalized if they had mental health issues," he says. "What people don't understand or see creates fear, and that leads to people not being willing to come forward, because they're afraid of the stigma they may face personally or professionally."

# Why do construction workers have worse rates of mental health?

Gardner cited the statistic during his presentation that the construction workforce experiences suicide rates five times the national average. He says part of the way to change that reality is to start a conversation about mental health, both as an industry generally, and with the people experiencing mental health challenges.

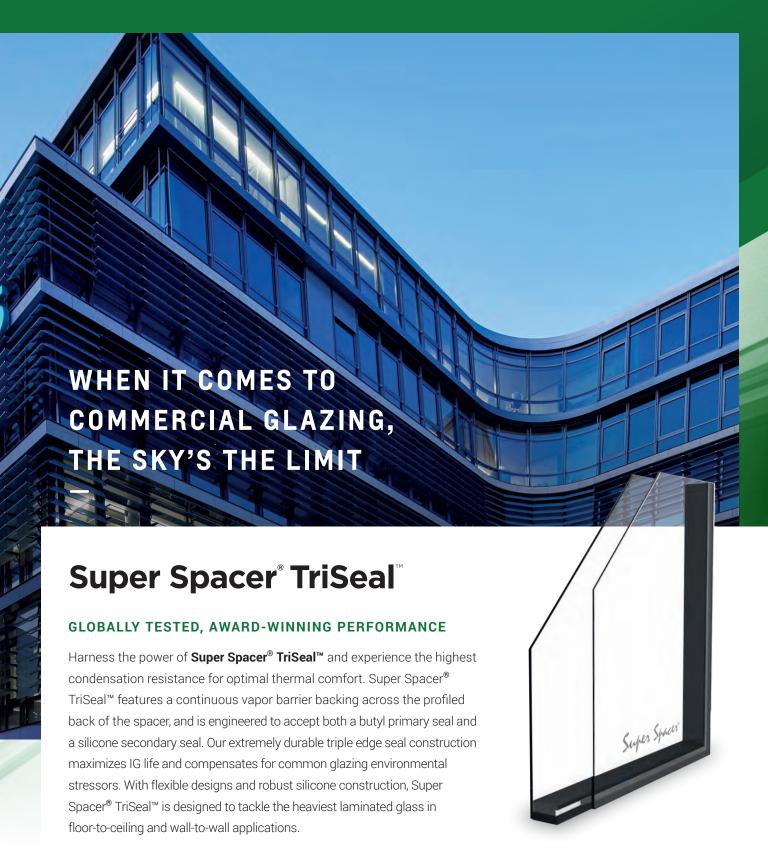
Gardner explains that while very rewarding, construction can be uniquely challenging, especially for those already experiencing a decline in mental health. "Construction is very project-driven, with deadlines that have to be met," he says. "That puts a lot of stress and pressure on

the workforce," who may also be working remotely at times, not seeing family or friends for long stretches of time.

# How can colleagues and employers help?

Gardner says it's important to start a conversation with the colleague if they start exhibiting changes in behavior, such as being tired all the time, showing up late or producing work of worsening quality. The person may also become withdrawn, or even change in appearance. "The key is just being able to say, 'I've noticed things aren't right; let's go talk to someone that can help,' and then pointing them in the right direction," he says. ICBA developed a program to address mental health that is designed to make these conversations easier, says Gardner, not to make project managers into health care workers.

Gardner says it's also necessary to underline successes on the job, when they happen, to create a more positive work culture. "Rewarding success and recognizing project milestones is also important, and celebrating that success [with workers]."



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