

ANNUAL REPORT

**20
23**

FOREWORD

Looking back to move forward.

NGA's Board of Directors, industry volunteers and stakeholders recently revisited our strategic plan to assess the level of impact on members and the industry, and to set goals for the association's future work.

The exercise confirmed that NGA is on the right course since the combination of NGA and GANA in 2018. We have met or exceeded many of our initial objectives since establishing the association's core goals, and are having a positive impact on our member companies.

This annual report captures highlights of those positive impacts from the past year. You will see the ways NGA continues to help members and the industry grow and succeed, organized by our four strategic goals: Advocate—Be a strong advocate to promote and defend the glass industry; Educate—Drive excellence, safety and results through education and training; Promote—Elevate the image of glass as a safe, healthy, sustainable and inspiring building product; and our newest goal created in recognition of the continuing skilled labor shortage across all segments of our industry, Workforce Development—Advance the industry as a viable, thriving and exciting career path.

On behalf of the 2023-2024 NGA Board of Directors and our dedicated industry volunteers, we commit to continuing to help move the industry forward.



Nicole Harris
President and CEO
National Glass Association

ABOUT THE NGA

CORE PURPOSE

NGA is the authority and resource for its members and the industry to grow successful businesses and to champion the benefits of glazing and glass building products.

OUR FOCUS AND VALUES

Member Focus

We strive to thoroughly understand our members' business objectives and goals so we can deliver the best member experience.

Inclusion

We represent a diversity of companies with a unified purpose to help grow successful businesses and to champion the benefits of glazing and glass building products.

Innovation

We pursue every avenue to fulfill our vision of glass as the material of choice to enhance spaces where people live, play, learn, work and heal.

CORE GOALS

Educate

Drive excellence, safety and results through education and training.

Promote

Elevate the image of glass as a safe, healthy, sustainable and inspiring building product.

Advocate

Be a strong advocate to promote and defend the glass industry.

Workforce Development

Advance the industry as a viable, thriving and exciting career path.

WHAT SETS THE NGA APART

NGA is focused

We are the only trade association focused exclusively on glass, glazing and glass building products issues and needs.

NGA is comprehensive

We serve and represent the entire glass, glazing and glass building products supply chain— from primary glass manufacturers to glass fabricators to commercial and residential glass installing companies.

NGA is different

We have a unique set of products and services to meet member and industry needs at every level of the glass, glazing and glass building products supply chain.

EDUCATE

OVERVIEW

NGA's resources for education and training take several forms to meet the needs of its members and stakeholders when and where they're at—whether that's at a jobsite, on the plant floor or in an office. MyGlassClass.com, technical papers and manuals, business publications, a host of webinars, conferences and events held throughout the year, along with education for design professionals, are ways NGA helps keep its members and the industry at the top of their game.

GlassBuild America exhibitors

481

GlassBuild America participants

8,713

MyGlassClass.com users to date

4,778

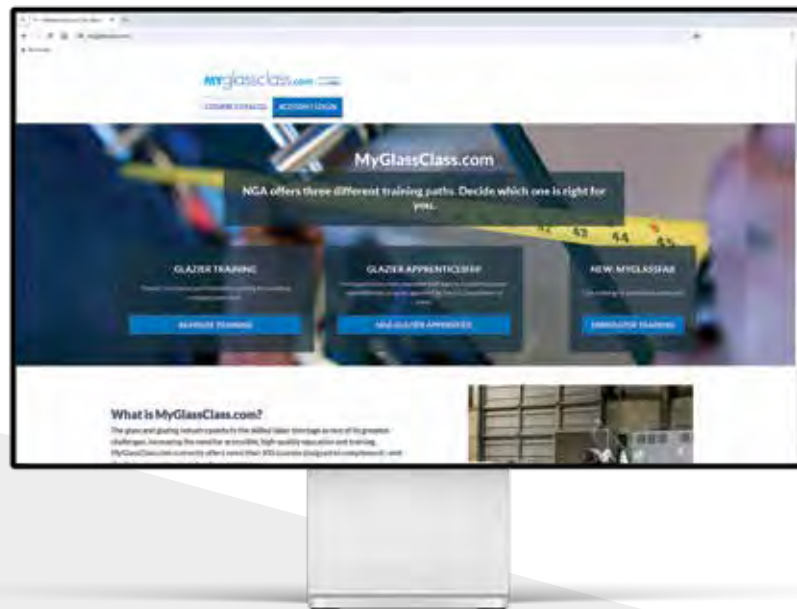
New MyGlassClass.com users in 2023

650+

EDUCATIONAL TOOLS

MyGlassClass.com

MyGlassClass.com offers more than 120 courses designed to allow new hires to learn about job responsibilities and tasks, products, and installation techniques. Available in Spanish and English, the courses provide product, fabrication and installation training.



A powerful new tool.

“MyGlassClass.com helped us expedite training dramatically. We were able to get online and let people learn at their own pace.”

**BRAD THURMAN, VP OF SALES,
FABRICATED PRODUCTS, GGI**

MyGlassFAB

New for 2023, MyGlassFAB offers core training for production personnel that they can access on their smartphone to learn about job responsibilities, safety, products, and fabrication techniques. Designed specifically for glass fabrication employees, MyGlassFAB combines online courses with skills-based activities on safety, measurement techniques, and glass quality and defect inspection.

WEBINARS + PODCASTS

Thirsty Thursday

Quench your thirst for knowledge with NGA's Thirsty Thursday webinar series.

2023 TOPICS:

- 10 Industry Metrics You Should Be Watching
- What's A Stretch Code and Why We Should Be Paying Attention
- Hurricane Standards, Testing and the Product Approval Process

Glass Cast and Window Cast

NGA launched its new vlog and podcast series, Glass Cast and Window Cast, in summer 2023. This series explores need-to-know business topics, including solutions to help owners build profits, and insights on market trends and challenges.



Watch all of our Thirsty Thursday webinars and other video content from the NGA on our YouTube channel.

FOR DESIGN PROFESSIONALS

AIA-approved Presentations

NGA is an approved AIA Provider of CES credits. Thanks to the involvement of our volunteer members, NGA has several approved presentations for live (in-person or online) delivery as part of its resource library.

NGA Blueprint for Collaboration: A Path Toward Sustainable Facades

Held in conjunction with AIA '23 – San Francisco, the NGA Blueprint for Collaboration: A Path Toward Sustainable Facades, facilitated networking while offering education. Session panelists included Lisa Rammig, Eckersley O'Callaghan; Chris Fronsoe, Vitro Architectural Glass; Stanley Yee, Dow; Mike Turner, YKK AP America; Sophie Pennetier, Enclos; Mark Suehiro, CRL; and Tom Culp, Birch Point Consulting and NGA code consultant.

Glass & Glazing Design Academy with Architectural Record

For the fifth year, NGA hosted its Glass & Glazing Design Academy with Architectural Record.



Created by NGA Member volunteers, this new manual provides guidance and specific best practices for frameless shower enclosures, to educate and assist glass professionals on designing, measuring and installing safe, functional shower enclosures.



Access the Academy to learn all 8 learning units toward the Glass & Glazing Badge.

CONFERENCES + EVENTS

GlassBuild America

GlassBuild America celebrated its 20th anniversary this year with its largest show in more than a decade.

Glazing Executives Forum

Nearly 200 industry leaders gathered for the 17th annual Glazing Executives Forum in conjunction with GlassBuild America in Atlanta. New in 2023 was “Solutions on Display” – a guided round-robin tour of select booths on the tradeshow floor.

January 2023 NGA Glass Conference: Miramar Beach

Industry technical leaders focused on advocacy for architectural glass as a sustainable material, and the ways it enhances occupant experience in buildings. Sessions addressed building security, daylighting, IGU technology and architectural glass recycling.

July 2023 NGA Glass Conference: Tacoma

High-performance glazing, industry code updates and workforce development challenges were among the topics that took center stage in Tacoma. NGA’s Forming, Fabricating and Advocacy committees also met during this time.

Building Envelope Contractors (BEC) Conference

The 2023 BEC Conference marked 25 years of this event serving the contract glazing members and companies industry-wide.



[Read Event News](#)



The 2023 GlassBuild America: The Glass, Window & Door Expo (above) was the largest in more than a decade featuring 481 exhibiting companies occupying 188,300 net square feet. The event drew more than 8,700 participants as it celebrated its 20th year.

Connor Lokar’s popular construction economic outlook (opposite, far right) took place on the tradeshow floor Main Stage, open to all GlassBuild America attendees as part of NGA’s 75th anniversary celebration. Other Main Stage highlights included sessions about the state of residential fenestration, mental health and suicide prevention, building business and community through DEIB (opposite, bottom), Women in Glass and Fenestration (opposite, top), and Need-to-Know Code and Regulatory Updates.



2024 NGA CONFERENCES & EVENTS

NGA Glass Conference: Isle of Palms | Charleston
Feb. 5-8, 2024 | Wild Dunes Resort – Isle of Palms, SC

Building Envelope Contractors (BEC) Conference
Mar. 3-5, 2024 | Nashville, TN

Glass Processing Automation Days (GPAD)
Mar. 5-6, 2024 | Nashville, TN

NGA Glass Conference: Milwaukee
Aug. 6-8, 2024 | Milwaukee, WI

GlassBuild America: The Glass, Window & Door Expo
Sep. 30 - Oct. 2, 2024 | Dallas, TX



PROMOTE

OVERVIEW

Elevate the image of glass as a safe, healthy, sustainable and inspiring building product. NGA maintains several avenues of engagement with our members, stakeholders and the industry. These include magazines, newsletters, websites, networking events, strategic alliances and social media.

Combined publication web views

800,000+

Combined print pages

1,292

Combined news items

1,100+

Total print issues

FOURTEEN

GLASS MAGAZINE

Glass Magazine delivers need-to-know technical, educational and market trend information to help companies across the commercial architectural glass industry build and grow their businesses.

KEY REPORTS

- World of Glass
- Top Glass Fabricators
- Top 50 Glaziers
- Annual Forecast
- All About Glass and Metals
- Glass Magazine Awards
- Annual Sourcebook



WINDOW AND DOOR MARKET SURVEY

Window + Door and John Burns Research and Consulting partnered to conduct a quarterly study of residential window and door companies about the market, headwinds, tailwinds and more. Email chrisbeard@jbrec.com to participate in this important study.

WINDOW + DOOR

Covering the entire residential fenestration industry from source to sale, Window + Door is dedicated to providing the entire fenestration industry with unbiased, relevant content that helps companies build more profitable businesses.

KEY REPORTS

- Industry Pulse
- Top Manufacturers Report
- Case Studies
- Window + Door Awards
- Trendhunter
- Annual Buying Guide

CREATING COMMUNITY

The NGA member community is 1,800 companies strong. We are contract glaziers. We are full-service glass and specialty, and residential window and door companies. We are fabricators, manufacturers and suppliers. NGA provides a gathering place for you to learn, share, engage and make connections to help you and your business grow.

Alliances

NGA values its partnerships with other organizations and individuals that help us to better champion the glazing and glass building products industry.

“There is immense power when a group of people with similar interests gets together to work toward the same goals.”

IDOWU KOYENIKAN,
AMERICAN AUTHOR



On LinkedIn, NGA highlighted the first-hand experiences of a group of women leading member and industry companies in the glass and fenestration fields.

NGA MEMBER UPDATES

NGA members receive updates twice per month.

Member Spotlights

Each edition includes the NGA Member Spotlight, proudly highlighting our members to introduce them to fellow members and the industry.

NGA Project Manager Spotlight

New in the fall of 2023 was the launch of a special Project Manager Spotlight Series, which identifies specific individuals in project management roles in both glazing and fabricating companies in a casual interview format.

The Hub

Over the past year, NGA has been discussing and developing new or enhanced ways to encourage and expedite new and existing member engagement. The first

step in this plan was the launch of The Hub, which allows members to access resources more easily. This page follows the member journey of engagement within the association from initial membership, finding papers and manuals, subscribing to publications, attending events and sharing with peers.

NGA initiated a new member engagement plan in October to maintain regular engagement with newly joined member companies during their first 18 months of membership. During this time, they will receive information on applicable resources and events, a phone call from someone on NGA staff, and a message from an NGA Board member.

ADVOCATE

OVERVIEW

NGA seeks to be a strong advocate to promote and defend the glass industry. NGA's advocacy and technical initiatives respond to the relentless, ever-changing challenges to our industry. NGA is the glass and glazing authority. From the U.S. government to industry code bodies, organizations look to NGA to be the definitive reference when it comes to the architectural glass industry.

Architects at NGA's
Architectural Record webinar

742

Americans employed by NGA
member companies

71,000

Annual revenue generated by NGA
member companies

\$10.3b



GSA LOW-EMBODIED CARBON STANDARD

The United States General Services Administration announced that Vitro Architectural Glass, an NGA member company, was awarded a project for American-made sustainable glass for the Virginia courthouse.

This project is part of GSA's six-month pilot program applying interim Inflation Reduction Act Low Embodied Carbon Material Requirements for 11 GSA construction projects, three including glass.

LEGISLATIVE ADVOCACY

NGA provided input and responded to requests for information on several legislative proposals at the federal and state levels.

GLASS & GLAZING ADVOCACY DAYS

NGA hosted the second annual Glass & Glazing Advocacy Days March 27-28 in Washington, D.C., to advocate and educate about glass in the built environment. NGA staff and members met with legislative representation from several states, and with representatives from the U.S. Environmental Protection Agency and U.S. Department of Energy to discuss five policy priorities and the vital role glass plays in the built environment.

- School security
- Bird-friendly glazing
- High-performance glazing
- Recyclability/sustainability
- Workforce development

NGA's 1,800 member companies employ 71,000 Americans who produce and install glass for homes and commercial buildings and who generate more than \$10.3 billion in annual revenue.

NGA member companies are following up with their local representatives to continue the momentum and conversation generated during the event.

MILESTONES

Q1 Highlights
New NGA Task Group, International Year of Glass wrap-up, NGA-GANA anniversary, public comments, GSA standard for materials

Q2 Highlights
Standards and governmental meetings participation, Glass Performance Days, GSA Pilot Program

Q3 Highlights
Codes Help Center, Architectural Record webinar, Glass Cleaning Procedures Technical Papers

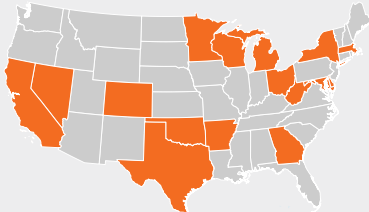
Q4 Highlights
Energy Star Version 7.0, Sustainable Industrial Processing Summit

AWARDS

NGA gave two membership awards in 2023 in honor of service, volunteerism and the betterment of the industry.

15

States represented at Glass and Glazing Advocacy Days



NGA provides one-pagers for legislators and stakeholders to share how glass is an adaptable, sustainable, energy-efficient, strong, beautiful, safe and essential building product.



Read news from the Advocacy and Technical team.



NGA members and staff meeting with Rep. Tom Tiffany in Washington, D.C.



Urmilla Sowell presents Timothy Moore with the Gregory Carney Legacy Award, which goes to an individual involved in and advocating for the industry.



Danny Donahue, NGA's 2023 Volunteer of the Year. This award goes to an NGA member that has made significant contributions to the association or profession in the past year.

WORKFORCE DEVELOPMENT

OVERVIEW

Introducing NGA's newest goal: To advance the industry as a viable, thriving and exciting career path. Labor—specifically a lack of skilled labor—continues to challenge installing companies and glass fabricators, with both Top Glaziers and Top Fabricators citing it as their biggest obstacle in 2023, following inflation and the economic slowdown. NGA's workforce development efforts fall into three areas: raising awareness, recruitment, and training and apprenticeship.

RAISING AWARENESS

Promote the industry to high school students, second-chance career candidates

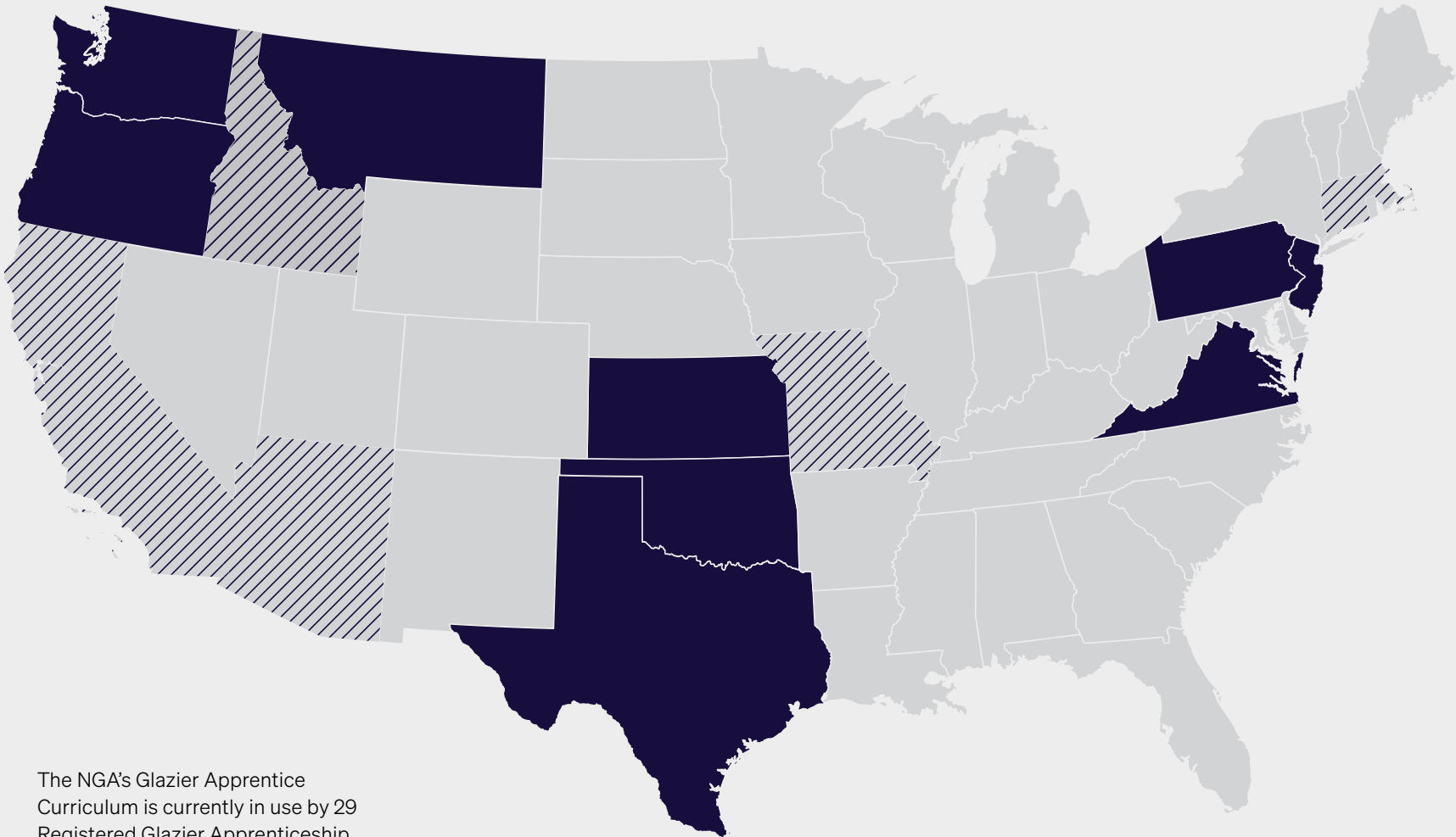
RECRUITMENT

Provide how-to guides, toolkits

APPRENTICESHIP

Advance the NGA Glazier Apprentice Curriculum

The association offers the NGA Glazier Apprentice Curriculum for organizations and companies that want to establish a glazier apprenticeship program approved by the U.S. Department of Labor.



The NGA's Glazier Apprentice Curriculum is currently in use by 29 Registered Glazier Apprenticeship Programs nationwide, including nine new programs in 2023.

- Statewide registered apprenticeship programs using the NGA Glazier Apprentice Curriculum
- ▨ Individual company RAPs using the NGA Glazier Apprentice Curriculum

RAISING AWARENESS

While the glass industry is not alone in the labor shortage—the construction workforce shortage tops half a million in 2023—it does face the additional challenge of educating the public about the glass and glazing trade. Raising awareness of the glass and glazing industry, particularly among high school students and second-chance career candidates, remains key to eventually easing the labor shortage. This year, NGA launched the “Become a Glazier” webpage to educate the public about the glazing trade and the opportunities it offers.

RECRUITMENT

Once aware of the trade, the goal is to convert interested people into employees, and NGA is exploring ways to help connect potential employees with industry companies. In 2023, NGA participated alongside member companies at the Associated Builders and Contractors Inland Pacific Chapter Construction Trades Night and Technical Glass Products’ (TGP) Manufacturing Day events to help recruit high school students interested in a career in glazing or glass fabrication.

TRAINING + APPRENTICESHIP

Ensuring member companies and the industry have access to training resources remains a top priority for NGA, and it continues to invest in the MyGlassClass.com and MyGlassFAB platforms. The association also offers the NGA Glazier Apprentice Curriculum for organizations and companies that want to establish a glazier apprenticeship program approved by the U.S. Department of Labor. Students who complete the NGA Glazier Apprentice Curriculum will earn a jointly endorsed NGA/NCCER credential indicating a journeyman-level minimum competency reached through knowledge and performance.

THE NGA FOUNDATION

This year, FHC | Frameless Hardware Company committed to continue and increase its generous support of NGA’s workforce development efforts. FHC remains the largest contributor to the NGA Foundation and has covered the curriculum costs for more than 273 glazier apprentices throughout the country, in addition to funding the development of new training and recruitment initiatives. “Our business and this industry only work if we have glaziers in the game to keep glass in buildings,” says Chris Hanstad, president, FHC. “They are our livelihood and we’ll spare no efforts in equipping them to grow. We grow when they grow, and NGA’s MyGlassClass.com education platform is the most impactful solution for us to get behind, support and realize that goal.”

CONCLUSION

The NGA member community, at 1,800+ companies, continues to grow and represent all aspects of the glazing and glass building products industry. We are contract glaziers. We are full-service glass companies. We are fabricators, manufacturers and suppliers. NGA affiliated chapters, volunteers and Board of Directors help us develop resources important to the industry and amplify their reach.

Number of NGA affiliated chapters

11

Committees and task groups

34

Volunteer hours in 2023

425

NGA resources purchased or downloaded in 2023

6,709