NGA
NATIONAL GLASS ASSOCIATION with GANA

NGA GLASS CONFERENCE™
CARLSBAD

FEBRUARY 3-6, 2025

Fabricating Committee

2024 New and Updated Resources

New! Cleaning Architectural Postcards in Spanish and English

New! NGA Shower Door Information Flyer

New! Determining an Acceptable Color Variance for Decorative Glass

New! Key Strategies of Bird-Friendly Glazing AIA Presentation

New! Thermal Bridging Considerations at Interface Conditions AIA Presentation

Updated! The Value-Added Performance of Coated Glass AIA Presentation

Updated! FB06-24 Proper Procedures for Cleaning Flat Glass Mirror

Updated! FB24-24 Hurricane Product Substitution

Updated! FB32-24 Dynamic Glazing for High Performance Buildings

Updated! FB22-24 Proper Procedures for Fabrication of Flat Glass Mirrors

Updated! IGMA/NGA TB-1601-24 Guidelines for Use of Capillary Tubes

2024 New and Updated Resources Continued

Updated! FB42-24 Assessment of Decorative Glass Strength Properties

Updated! FB57-24 One Optical Number Does Not Fit All

Updated! FB62-24 Thermal Stress in Heat-Treated Spandrel Glass

Updated! FB44-24 Assessing the Durability of Decorative Glass

Updated! FB61-24 Tornado Resistant Glazing

Updated! FB71-24 School Security Glazing

Updated! FB37-24 Glass Use in Furniture

Updated! FB36-24 Coastal Glazing and the Turtle Codes

Updated! FB56-18 (2024) Heat Soak Testing of Tempered Glass for Architectural Glass Applications

Updated! FB25-09 (2024) Performance Criteria for Glazing Subjected to Seismic Events

Updated! FB53-17 (2024) Benefits of Decorative Glass in Daylighting Applications

Republished! FB30-11 (2024) Proper Procedures for Receiving, Storage and Transportation of Flat Glass Mirrors

INDUSTRY STANDARDS

NGA works with standards and codes bodies to promote and defend the use of glass in the built environment.

STATEMENT ON ARGON AND GAS-FILLED INSULATING GLAZING UNITS (IGUS)

Many insulating glass units (IGUs) used in window applications contain argon or other gas fills.

The NGA does not have a position on insulating glass window longevity related to retention of argon or other gas fills.

NGA recommends referring to the window manufacturer guidelines for information on insulating window gas retention, window longevity and warranty information.

Design Considerations for IG Unit Cavity Pressure Compensation

- Source: IGMA TM-3200-21 (FGIA Technical Manual)
- Purpose: Understanding methods for compensating pressure changes in insulating glass (IG) units.

Glass Nomenclature Tool

What the tool has:

- A parser that reads the code and spits out the glass description
- A visual builder so someone can make a code without knowing all the rules
- An API endpoint for those that know how to call them. You can send a code electronically to the endpoint and the whole glass makeup is returned in detail.

Additional ideas to implement later:

- Spitting out the makeup in a specification format.
- Having a coating code list for Low-E and other coatings

Here is the link to test it.

Glass Nomenclature Sandbox

Demo the tool here!

Value engineering

How to overcome challenges in implementing new high-performance glazing products?

Task Group Chair
Rob Carlson, Tristar Glass Inc.

Phase 1: Data Collection

- Solicit feedback from glazing project stakeholders
- Solicit feedback from architects

Phase 2: Education

- One-Pager leave-behind with benefits of glazing
- Architect presentation: generalized value & performance of each type (curtainwall, storefront, stick built, unitized, etc.) for comparison
- Technical Paper
- Design calculator; Cost-benefit payback calculator; Regional cost calculator
- Template for substitution request- product must meet certain criteria

Project Tiers:

1. Legislative/Code Level
2. Owner/Developer/Property Manager/Cost Consultant Level (Pocketbook); Strategies to include as much glass as possible
3. Architect/Designer/Specifier- need specs that make sense
4. General Contractor (GC)- concerned with Budget & Timeline
5. Glazing Sub-Contractor (Sends out bid requests to Fabricators and Installs the Glass, Educates the General Contractor)
6. Fabricator
7. Manufacturer/Supplier

Value engineering

How to overcome challenges in implementing new high-performance glazing products?

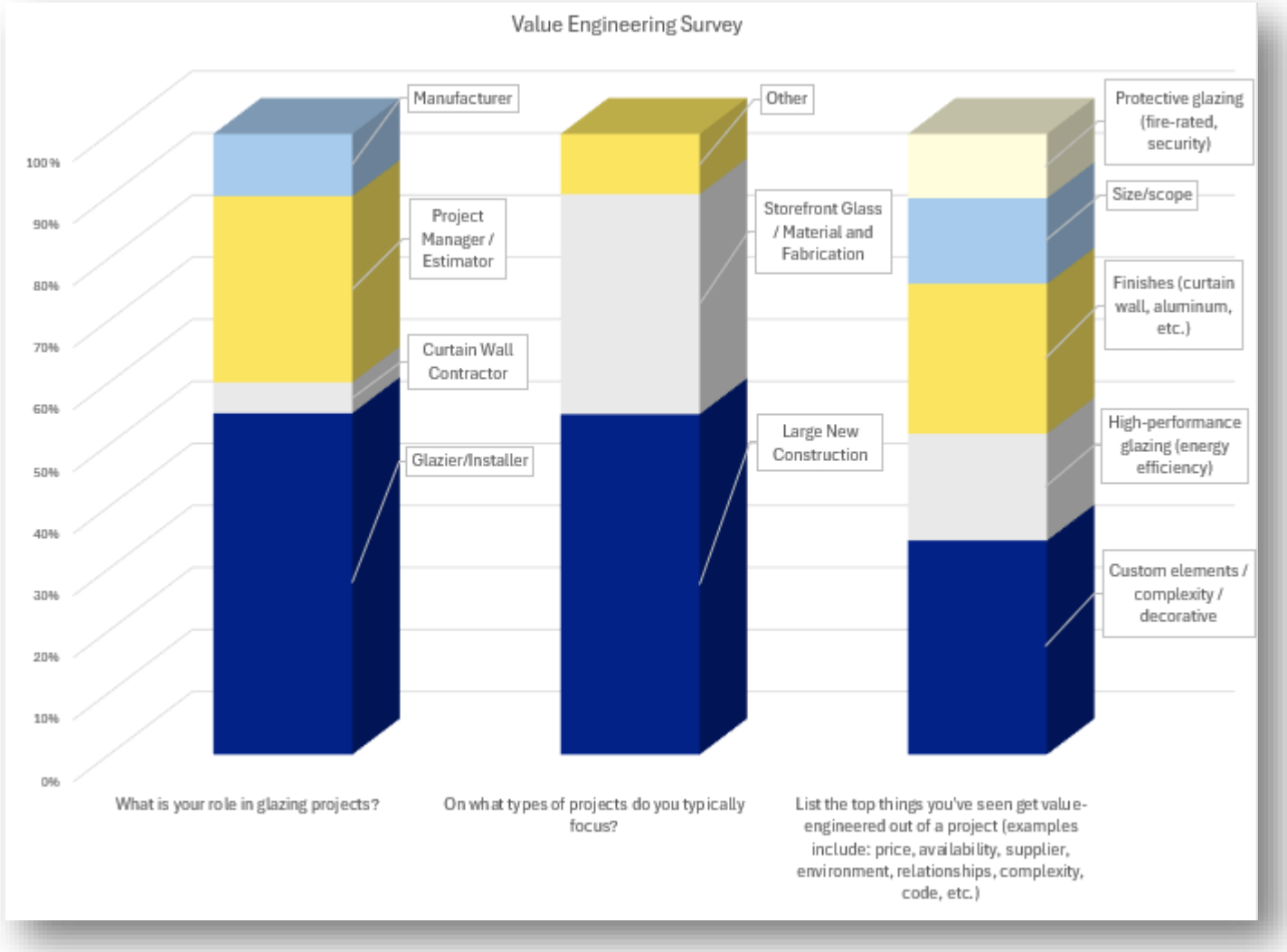
Phase 1: Data Collection

- Solicit feedback from glazing project stakeholders

Complete the Survey

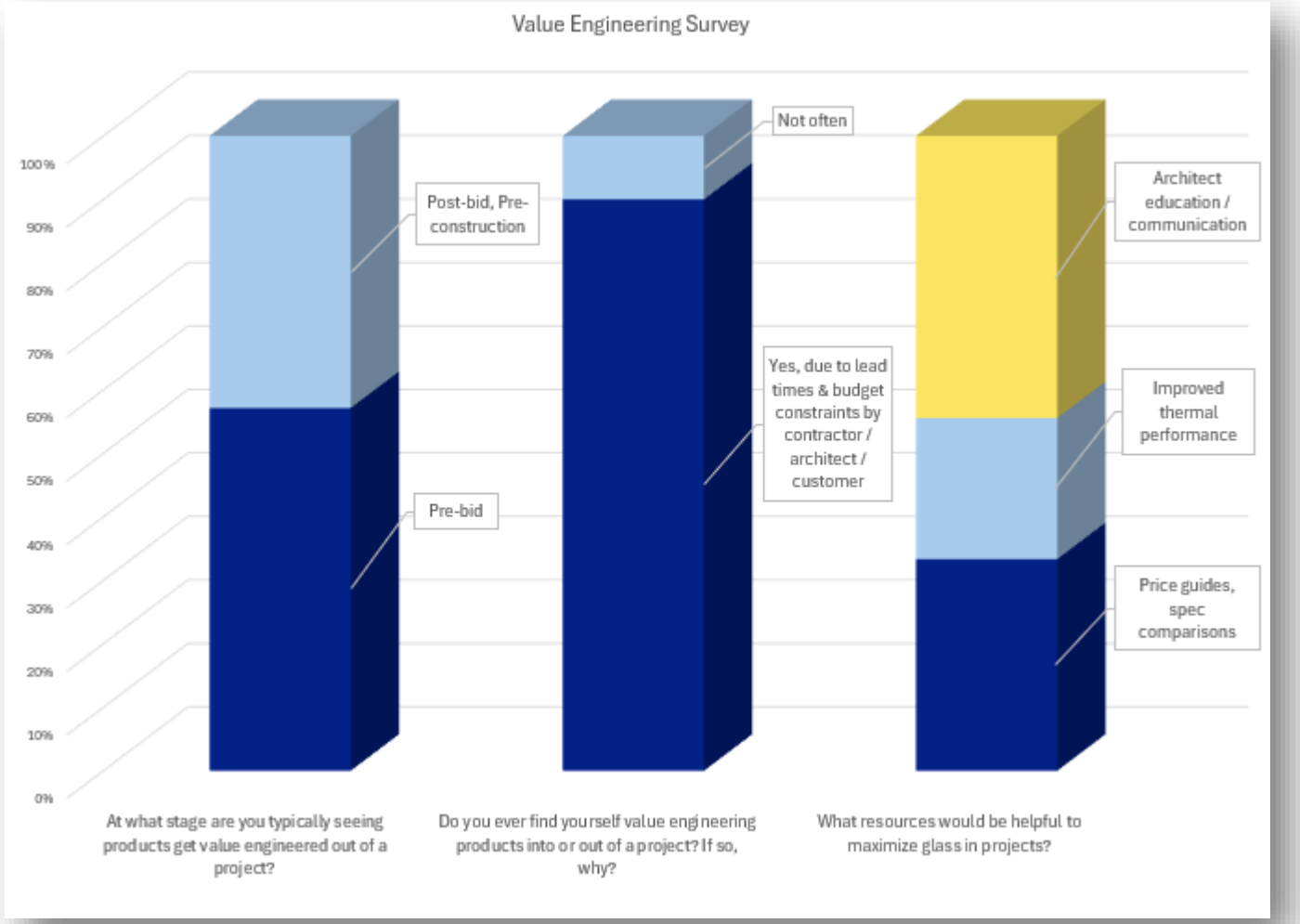
Value Engineering Survey Results

- What is your role in glazing projects?
- On what types of projects do you typically focus?
- List the top things you've seen get value-engineered out of a project.



Value Engineering Survey Results

- At what stage are you typically seeing products get value engineered out of a project?
- Do you ever find yourself value engineering products into or out of a project? If so, why?
- What resources would be helpful to maximize glass in projects?



Value Engineering Survey Results

Key Takeaways

- Updated with new results in October 2024
- Survey seemed to still be primarily completed by glaziers of larger projects
- Showing glaziers value engineering due to price and availability and trying to meet code minimums cost-effectively

Value Engineering Survey Results

Potential Solutions

- Provide a guide on Value Engineering in a project
  - *Does the new product meet safety codes?*
  - *Does the new product meet security requirements?*
  - *Does the new product meet the fire code?*
  - *Does the new product meet the same performance requirements?*
  - *Does the new product look the same?*
- Comparative guidance/tables

<u>How do we educate in a way that demonstrates the added value of glass?</u>

MYglassFAB™
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Training for production personnel

18 courses:

- Safety
- Glass Quality Inspection
- How to Measure Glass
- Basic Math
- *Coming Soon:* Tempering