

# CRYSTAL STRUCTURES, INC. – GLAZED STRUCTURES

## CSI Section 13 34 10

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### Product Overview

**Crystal Structures Glazed Structures** are fully engineered, high-performance glazed enclosures designed for architectural and functional applications including atriums, conservatories, and venues.

- Modular, custom-engineered framing systems.
  - Compatible with glass, laminated glass, and polycarbonate panels.
  - Engineered for structural, thermal, and weather-resistance performance.
  - Basis of design for CSI Section **13 34 10 – Glazed Structures**.
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## 2. KEY FEATURES

### Structural & Performance:

- Engineered aluminum or steel framing, thermally broken where required.
- Designed to meet local wind, snow, and seismic loads.
- Supports glazing spans up to 40 feet (project-dependent).

### Glazing Options:

- Tempered or laminated glass (ANSI Z97.1 compliant).
- Multiwall or solid polycarbonate, UV-stabilized, impact resistant.
- Fire-rated options: Class A and Class B available.

### Weatherproofing & Durability:

- Continuous perimeter gaskets and sealants.
- Integrated flashing and gutter systems.
- High corrosion resistance; powder-coated or anodized finishes.

### Additional Functionality:

- Optional motorized or manual roof and wall vents.
  - Built-in shading systems or louvers.
  - Optional accessory tracks for blinds, shades, or panels.
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### 3. TECHNICAL DATA

<b>Property</b>	<b>Specification</b>
Framing Material	Aluminum
Finish	Fluoropolymer or anodized
Glazing Types	Tempered, laminated glass
Maximum Span	Up to 40' (project-specific)
Fire Rating	Class A or Class B (per ASTM / local code)
Thermal Performance	NFRC 100 certified assemblies available
Water Penetration	ASTM E1105 tested, high-performance weep system

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### 4. INSTALLATION

- Installed per Crystal Structures' instructions.
  - Includes engineered shop drawings and detailed installation manuals.
  - Compatible with standard CSI construction practices.
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### 5. MAINTENANCE

- Clean glazing per manufacturer instructions.
  - Inspect seals, gaskets, and flashing annually.
  - Refinish metal components as required for long-term durability.
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### 6. WARRANTY

- Up to 10-year limited warranty on framing and glazing (per project specifications).
  - Coverage includes leaks, structural integrity, and finish performance.
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### 7. APPLICATIONS

- Atriums
  - Conservatories
  - Greenhouses
  - Solariums
  - Enclosed walkways and other specialty glazed spaces
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## **8. NOTES**

- All systems are engineered to meet local building and fire codes.
- Custom configurations available based on architectural design requirements.
- Coordination with structural engineers is recommended for large-span or high-load applications.