

Insulating Glass with Guardian Align™ Spacers



How do we Align?

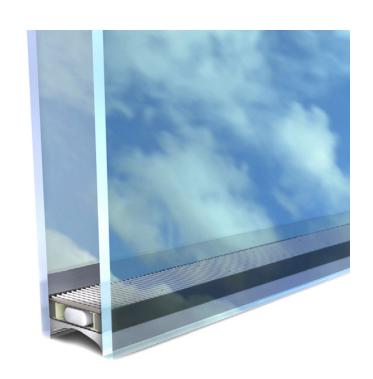
By sourcing Insulating Glass production to Guardian, a renewed focus on your core business awaits. Connect your IT system to ours to order thousands of unique parts automatically and get them sequenced and sorted, as if you made the units yourself. Guardian controls the process — from sand to complete insulating glass (IG) unit — made with Guardian float glass, ClimaGuard® low-E coatings, tempering and our proprietary Guardian Align™ spacer. We focus on IG units, so you don't have to.

Guardian Align Spacer

IG units made with Guardian Align spacers deliver performance for your customers – and performance for you. The proprietary warm edge spacer design offers thermal insulation approaching a foam spacer and best-in-class durability. The result of extensive research and development, Guardian Align spacer is built for reliability with:

- Guardian float and low-E glass options to meet code and design needs
- Ultra-thin, low conductivity corrugated stainless steel construction
- 90° corners with a hermetic 4th corner joint
- High-strength, low conductivity polyisobutyl (PIB)
 primary sealant with extra-long diffusion path
- High-modulus, commercial-grade silicone secondary sealant
- A bead-free, high-performance desiccant

Guardian Align spacers create a dependable seal with argon retention rates among the industry's best.





Lasting Performance with a 20-Year Warranty

Seal failures can hurt your business in several ways — replacement costs, damage to your brand and distracting your team from revenue-generating activities. You want IG units that are durably made by a company that you trust. IG units with Guardian Align that were subjected to ASTM E2190 testing withstood more than five rounds and conquered the more rigorous P-1 test. Backed by a comprehensive 20-year warranty, customers who use Align spacers get peace-of-mind with extremely low failure rate.

Customer-Focused Capabilities

Guardian's facility in Sun Prairie, Wisconsin, makes Guardian insulating glass with the Align spacer. The facility has automated and manual lines capable of producing standard IG units as well as shapes. Among Guardian in Sun Prairie's capabilities:

- Comprehensive options, including full grid, capillary breather tubes, and the ability to produce oversized units
- Tempering assets capable of producing residential IG units at commercial standards
- A highly automated production process, delivering output that meets the needs of the most stringent customers
- Custom sequencing and sorting capability to match our customers' production process

| | | ClimaGuard 70/36 | ClimaGuard 62/27 (new) | ClimaGuard 55/27 | ClimaGuard 53/23 | ClimaGuard 80/71#3 | ClimaGuard 70/36 + IS20 | ClimaGuard 80/71 + IS20 |
|-----------------------------|----------------------------|---------------------|---------------------------|---------------------|---------------------|-----------------------|----------------------------|----------------------------|
| COG (Center of Glass) | Visible Light Transmission | 70 | 62 | 56 | 53 | 80 | 68 | 78 |
| | U-Value | 0.25 | 0.24 | 0.24 | 0.24 | 0.26 | 0.2 | 0.22 |
| | SHGC | 0.38 | 0.28 | 0.28 | 0.23 | 0.71 | 0.37 | 0.64 |
| | Ext. Reflection% | 11 | 12 | 17 | 13 | 14 | 12 | 15 |
| | Int. Reflection% | 13 | 12 | 20 | 13 | 14 | 13 | 14 |
| Whole Window (Vinyl) | Guardian Align Spacer | 0.283 | 0.279 | 0.282 | 0.280 | 0.296 | 0.248 | 0.257 |
| U-Value (BTU-hr-ft2-F) | | | | | | | | |

^{*}All data calculated using LBL Window 7 software (IGDB version 71) IGU Glass Configurations: 3.0mm(1/8"), 12.7mm(1/2"), 3.0mm(1/8")

Whole window performance calculated using LBL Window 7 software based NFRC standard sized double hung under NFRC-100 conditions.

To learn more, please call 1-855-58-GLASS (45277) or visit guardianglass.com.

Completely Guardian. Completely Ready.

Sourcing to Guardian means you get a partner who reliably delivers to customers big and small, continuously is developing value-added solutions, and access to a global team of experts to meet your product development needs. So, optimize your floor space, meet new demands, and grow your business — leave the IG units to us.

See what's possible™

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The performance values shown are nominal and subject to variations due to manufacturing tolerances. Guardian reserves the right to change product performance characteristics without notice or obligation.