



CUSTOM BUILT

WINDOWS & DOORS MADE IN RI.



Polar Guard Series

Premium Window Systems for
Replacement or New Construction

Engineered and custom-built to give you a
lifetime of durability, carefree service and
superior thermal performance

Sound Investment In Your Home

More than 30 years of research and development are forged into every Polar Guard window, resulting in one of the world's most durable and efficient window systems. Utilizing only the highest grade materials and state-of-the-art energy-saving technologies that decrease your energy costs, Polar Guard windows will enhance the beauty and value of your home while delivering virtually maintenance-free service. Each Polar Guard window is custom-made by experienced craftsmen to satisfy your specific needs and your homes architecture, assuring a perfect fit and reliable operation for many years to come.



Uniting energy-efficiency and advanced performance with quality craftsmanship and security, Polar Guard windows set a new benchmark for high performance windows.



1. Highest quality, maintenance-free vinyl extrusions feature:
 - Beautiful sculpted detail on sash and frame.
 - Virgin PC only (no recycled vinyl) will never pit, peel, corrode, dent or rust, and never need painting or puttying.
 - Silky smooth, soft white vinyl finish cleans easily with household cleaners.
2. Rugged fusion welded, multi-chambered sash and master frame components provide uncompromised structural integrity and optimal thermal efficiency.
3. Dual finned weather seals form a solid barrier against air, water, dust and noise for super energy efficiency.
4. Stainless steel constant force 3/4" balance system ensures smooth, effortless raising and lowering of sash.
5. Interlocking meeting rails feature dual cam action locks. Fingertip-actuated night latches allow you to ventilate, yet maintain the security of a locked window.
6. State-of-the-art insulated glass systems, independently tested and certified (see glass options section) provide superior thermal performance and significantly reduce sound infiltration.
7. Integral, continuous, contoured lift handles provide easy sash operation and eliminate unsightly screw-on handles which can weaken over time.
8. Engineered sloped sill features innovative interlocking sash-to-sill design which dramatically improves structural ratings.
9. Available with or without integral nailing flange as well as a variety of accessory trim packages. Included half screen (not shown) features dual fingertip-actuated locking bolts. (full screen available).

Custom designed to accommodate your taste and the distinctive style of your home.



Styles

- Double Hung
- Picture Window
- Slider
- Hopper
- Bow and Bay
- Casement and Awning
- Architectural Shapes

Decorative Grids (Between the Glass)

Grid Styles



3/4" Contour 5/8" Flat

Grid Patterns



Colonial Prairie Diamond

Finishes

- White (standard)
- Beige
- White interior / Solid Acrylic exterior
- Woodgrain interior / White Exterior

Note: Colors are reproduced by lithographic process and may vary slightly from colors of actual product.

Woodgrain Interior



Natural Oak Barrister Oak



Colonial Cherry

Solid Acrylic Exterior



Bronze Cocoa



Black Forest Green

Locks



Dual cam-action sash locks
(standard)



Optional revolutionary "Ultra-Tech" lock n' tilt mechanism simplifies tilting of sash for cleaning while offering a true flush mount and a cleaner, crisper meeting rail.

Exterior Casing

To enhance the beauty of your Polar Guard windows, Custom Built offers maintenance free vinyl exterior casing factory applied to any of our vinyl new construction window products.

- Casings include nail flange with built in 3/4" J channel.
- Choice of 3 1/2" flat (New England) or 2 1/4" 908 (brickmold) style casings.
- Choice of Picture Frame all four corners or Picture Frame head with nose sill



3 1/2" flat casing
(shown with nose sill)



Brickmold casing
(picture frame style shown)

Benchmark Performance

Polar Guard windows are rigorously tested by independent test labs to exceed industry and U.S. Government standards for thermal performance and energy-efficiency.

The Anatomy of High Performance Window Glazing

Low E is seasonably “smart” glass, designed to know where you want the heat and keep it there. By utilizing an ultra thin metallic titanium coating inside the glass, Low E reflects heat back to its source resulting in reduced heating and cooling costs and the potential for condensation, keeping your home more comfortable year-round. Additionally, Low E protects your furniture, carpets, drapes and other fabrics the sun’s damaging UV rays, while allowing indoor plant life to flourish.



Super Spacer® warm edge insulating glass spacer dramatically reduces thermal conduction through the glass edge, providing optimal thermal performance and the lowest U-value of any spacer in the industry. The unique all-foam formula of Super Spacer®:



- Is resistant to condensation, mold, bacteria and fungi like no other spacer, ensuring enhanced comfort and health in the home.
- Is a true “dual seal” system. It has been shown in durability and weathering tests to have up to 9 times the life expectancy of single seal insulating glass systems, offering unparalleled sustainability and long-term performance.
- Provides improved sound absorption and decibel reduction over traditional metal spacers.
- Offsets the effects of temperature change, barometric pressure, and wind load. The end result is fewer seal failures and fewer stress cracks as compared to competitive insulating glass systems.

Argon is a safe, nontoxic, nonreactive, clear, and odorless gas. The addition of argon gas to the air space between the panes of an insulated glass unit offers measurable improvement in the windows’ thermal performance. As argon is much denser than air, heat and cold transfer is reduced measurably as compared to air.

Additionally, insulated glass units filled with Argon gas block sound transmission more effectively than do insulated glass units without Argon (up to 3-4 decibels). And who wouldn’t like a little more peace and quiet in the home!

Thermal Performance (DH)

Glazing Description	U-Value	SHGC
7/8” Low-E (Standard)	0.36	0.44
7/8” Low-E + Argon + Super Spacer	0.29	0.44
7/8” Double Low-E + Argon + Super Spacer	0.25	0.34

Structural Performance (DH)

Title	Summary of Results
Primary Product Designator	R-PG50 1016 x 1600 (40 x 63) H
Maximum Structural Design Pressure	+/- 2400 Pa (+/-50.13 psf)
Air Infiltration	.9 L/s/m2 (0.17 cfm/ft2)
Water Penetration Resistance Pressure	360 Pa (7.52 psf)

Polar Guard window products are available through:

