



VINYL | IMPACT SERIES 500



*“PGT values the importance of serving the community because we are part of the community. We engineer products we would want in our own homes, nothing less.”*

*– Rod Hershberger, President & CEO*

## A TRADITION OF EXCEPTIONAL PRODUCTS, RELIABILITY, AND SERVICE

Founded in 1980, PGT® pioneered the U.S. impact-resistant window and door segment, growing from just four employees to approximately 1,500 at its manufacturing facility in Venice, Florida.

Today, PGT offers a total of 12 different high quality window and door lines.

Hurricane protection, security against intruders, noise reduction, UV filtering, energy efficiency, affordability, and style are some of the most notable benefits that PGT's products have to offer.

When you choose PGT products for your home or business, you can always expect top design, improved energy efficiency and extraordinary strength for the life of your investment.

You can have the confidence that PGT will not just meet, but exceed your expectations.

# SEE WHAT'S INSIDE

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VALUE

## YOUR ALL-IN-ONE SOLUTION FOR CONTINUOUS, EFFORTLESS PROTECTION

Selecting new windows and doors for your home is an important decision, especially when you want a balance of beauty, strength and value.

### **PGT® WinGuard® Vinyl products feature:**

- Laminated insulating glass
- Multi-chambered frames
- Fusion-welded corners
- Super Spacer® nXt™

By choosing from our WinGuard line, you are taking the right steps to protect your family and home with the most trusted, best-selling impact-resistant brand in the U.S.





*WinGuard® is America's  
leading impact-resistant  
product, with over 3 million  
units installed and no  
reported failures.*

## TO KNOW OUR PRODUCTS IS TO KNOW OUR PROMISE

PGT® is the authority on impact-resistance. Our expertise is founded from our collaboration with Miami-Dade County to establish testing protocols for impact-resistant products. As a result of this partnership, in 1996 PGT became the first manufacturer to offer a full suite of impact-resistant windows and doors that are – to this day – among the strongest, safest, and most reliable products in the industry.

From design to delivery, we oversee every step in our manufacturing process to ensure unsurpassed quality in every product we make. Our reputation is built on the dedication to superior materials, service and results we bring to your home for a difference you can count on.



STRENGTH

## PERFORMANCE TESTING

PGT® is dedicated to earning your confidence in our products. For this reason, we test our windows and doors to confirm that they meet the exacting standards of the industry's most respected accredited organizations. These certifications ensure you that PGT stands behind every product we manufacture for your home.

### PGT WinGuard® Vinyl product certifications, ratings, and testing include:

- Florida Product Approval
- International Building Code
- AAMA Tested / Keystone Certified
- STC (Sound Transmission Class)



See the Glossary of Terms for more details on each of these certifications and testing protocols.





*WinGuard® blocks 99% of UV rays, reduces outside noise, and deters residential intruders, giving you the protection you want with the value and beauty you seek.*

## DESIGNED FOR STRENGTH

PGT® invests hundreds of hours into testing the designs of our windows and doors to ensure that all of our products will perform at their optimum level for many years to come.

**Each PGT WinGuard® Vinyl window and door is tested to meet or exceed the International Building Code for:**

- Air infiltration
- Deglazing
- Structural integrity
- Residential intruder protection
- Water resistance
- Forced-entry resistance
- Small and large missile impact protection



# RELIABILITY

## ENGINEERED TO MEET HURRICANES HEAD-ON

When a storm threatens your home, PGT® WinGuard® Vinyl products have you protected without lifting a finger. Each window and door features laminated insulating glass, which is comprised of three panes of glass: two panes bonded together with a strong, clear interlayer for impact-resistance and one pane for added insulation.

PGT WinGuard products also eliminate the need for unsightly, hard-to-install shutters – saving you valuable storage space, time, energy and money, while improving your home's curb appeal.





*The combination of WinGuard® Vinyl products' glass makeup and heavy-duty, multi-chambered frame provides outstanding protection – safeguarding you and your family from flying debris and high winds.*

## SUPERIOR PROTECTION BACKED BY A SUPERIOR WARRANTY

PGT® operates on the premise that promises are made to be kept, which is why our WinGuard® Vinyl products are backed by one of the best warranties in the industry.

### **WinGuard Vinyl products include:**

- Lifetime warranty on the frame and component parts
- Limited lifetime warranty on the insulating glass unit
- 10-year warranty on the laminated glass unit



# ENERGY

## THE ENERGY-EFFICIENT ADVANTAGE FROM PGT®

People are choosing “green” living options for their home more than ever. With PGT WinGuard® Vinyl windows and doors, you never have to sacrifice strength for energy efficiency – our vinyl products offer the best of both worlds. Get protection you can trust with energy efficiency you can see in reduced heating and cooling costs.

### Features of WinGuard Vinyl products that contribute to excellent energy efficiency include:

- Multi-chambered vinyl frames
- Laminated insulating glass
- Super Spacer® nXt™





*PGT® WinGuard® Vinyl products feature Super Spacer® nXt™ dual-seal system, which lasts up to 5x longer than a single-sealed unit and provides some of the best thermal performances in the industry.*

## PROTECT YOUR HOME IN EVERY WAY

All PGT® WinGuard® Vinyl windows and doors have options available to achieve ENERGY STAR® ratings for energy performance including:

- **High-performance Low-E** to deflect solar heat gain and keep unwanted heat outside your home
- **Glass tints** that are effective at reducing heat transmitted through your windows
- **Argon gas** which helps reflect outside heat to regulate the temperatures inside your home





CUSTOM

## TAILORED EXACTLY TO YOUR NEEDS

No two projects are ever the same. That's why each product we make for you is custom tailored to match the exact specifications of your home. No matter the size of a project, all PGT® products meet our strict standards of quality, because your satisfaction and safety are our top priority.



## SELECTIONS TO FIT ANY LIFESTYLE

PGT® WinGuard® Vinyl windows and doors are designed for every home, especially yours, with choices of:

- Frame colors
- Glass tints
- Grid styles and patterns
- Low-E
- Privacy glass
- Sea Turtle Protection Code glass options

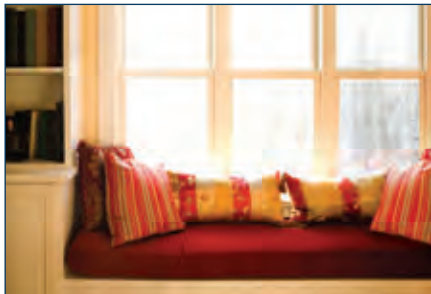
## WHAT PGT® WINGUARD® VINYL MEANS TO YOU



During a hurricane, flying debris can pierce the glass in regular windows and doors, resulting in wind and water damage inside your home. WinGuard Vinyl products can withstand repeated impact from a nine-pound 2' x 4' beam traveling at 34 miles per hour, followed by hurricane-force winds. Even if the glass is damaged, it will remain secure in its frame and continue to keep the elements outside.



Breaking a window is the most common means of entry for an intruder. While non-impact resistant glass shatters easily upon contact and offers little resistance, the durable interlayer used in WinGuard Vinyl products will keep the glass in place and provide an additional barrier that deters intruders.



Constant exposure to the sun's UV rays can dramatically fade your furnishings. The clear interlayer used in WinGuard Vinyl products filters 99% of these UV rays, helping your furniture, carpet, artwork and drapes retain their original beauty.



Noise outside your home is often something you have little control over. However, with WinGuard Vinyl windows and doors, the laminated glass significantly reduces ambient noise by absorbing sound rather than transmitting it, which keeps outside disruptions where they belong.



## GLASS TYPE COMPARISON



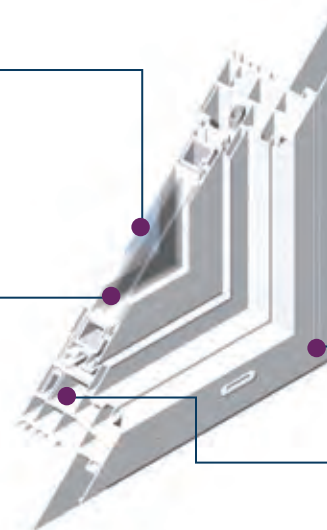
Laminated Glass

Single Pane Glass

Glass breakage patterns can vary greatly depending on the treatment and construction of the glass used in a window or door. WinGuard® Vinyl products include *laminated glass* which may crack if impacted, but will keep the glass pieces adhered to the laminate and secure in the frame. Conversely, *single pane* annealed glass will fracture into large shards and will not be held in the frame after breaking.

Impact-resistant laminated insulating glass – has an interlayer sandwiched between two pieces of glass to create a virtually impenetrable barrier. A third piece of glass offers enhanced insulation, further reducing your energy costs.

Super Spacer® nXt™ delivers superior energy performance and virtually eliminates condensation.



Fusion welded frame and sash corners for unmatched strength and durability.

Heavy duty multi-chambered vinyl frame for exceptional insulating values and energy cost savings.

## BEAUTIFUL WINDOWS ARE JUST THE BEGINNING

PGT® WinGuard® Vinyl products do more than just beautify your home - they offer an all-in-one solution for continuous, effortless protection from:

- Hurricane damage
- Intruders
- Outside noise
- UV rays

The high-quality materials used in our signature line of vinyl products:

- Eliminate the need for hurricane shutters or plywood
- Will never rot, warp, splinter, or need painting
- Are formulated to withstand the harshest conditions
- Are low-maintenance and easy to clean

### SUPER SPACER® nXt™

WinGuard Vinyl windows and doors also incorporate the ultimate thermal performance, durability and condensation reduction of Super Spacer® nXt™ at no extra charge.

#### Performance

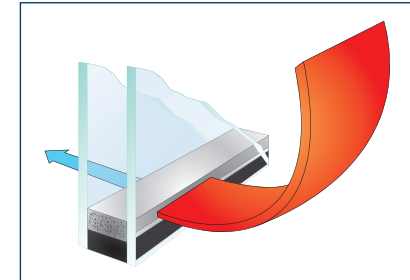
The all-foam design of Super Spacer® nXt™ units blocks air from escaping through your frame and provides the best thermal performance in the industry.

#### Durability

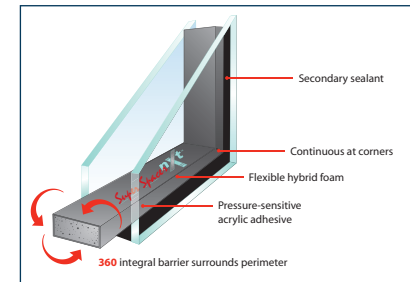
The dual-seal system of Super Spacer® nXt™ helps insulating glass units last up to five times longer than single-seal units.

#### Reduction

Super Spacer® nXt™ units significantly reduce condensation, which can lead to bacteria, molds, fungi, viruses and more.



Performance



Durability



Reduction

## GRID STYLES



### Flat Grid

- 13/16" wide
- Grid between the glass



### Contour Grid

- 1" wide
- Grid between the glass



### Basic Simulated Divided Lite

- 1" wide ogee applied to exterior
- 1" wide flat bar grid applied to interior



### Classic Simulated Divided Lite

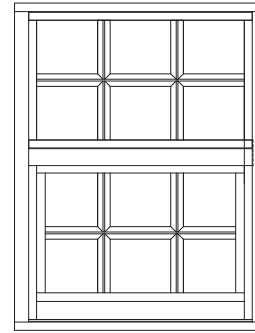
- 1" wide ogee applied to exterior
- 1" wide flat grid applied to interior
- 9/16" wide bronze shadow bar between the glass



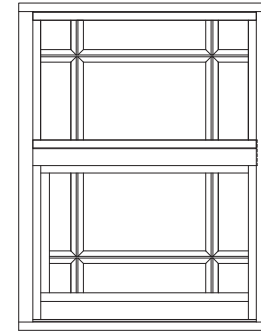
### Traditional Simulated Divided Lite

- 7/8" wide ogee applied to exterior and interior
- 9/16" wide bronze shadow bar between the glass

## GRID PATTERNS



Standard



Brittany/Prairie



## STANDARD FEATURES

Products in this series come standard with clear laminated insulating glass and a white frame that is ideal for new construction and remodeling projects. Operable windows also include a screen with 1816 mesh.

### Standard Frame Colors



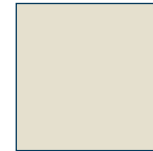
White

## PREMIUM OPTIONS

### Glass

- Tempered glass
- Privacy glass
  - Obscure (textured for enhanced privacy)
  - White Interlayer (opaque interlayer for enhanced privacy)
- Popular glass tints
  - Solarban® 60
  - Solarban® 70XL
- Argon gas

### Frame Colors



Beige



Bronze Exterior/  
White Interior

## SINGLE HUNG (SH500) AND DOUBLE HUNG (DH560)

### Pre-tensioned spiral balance system

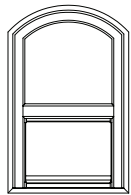
- Provides smooth, easy opening and closing

### Integrated lift rails and deluxe swivel locks

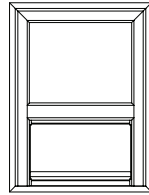
- Allow easy fingertip operation

### Tilt sash design

- For easy exterior cleaning



Single Hung  
Radius Top



Proview/Oriel



## HORIZONTAL ROLLER (HR510)

### Available in 2- and 3-lite configurations

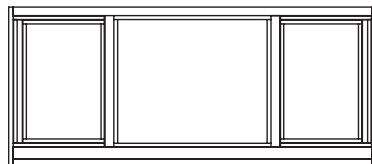
- Operation viewed from outside

### Low-friction brass tandem rollers in a nylon housing

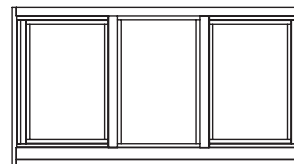
- Provide smooth, durable, adjustable operation

### Removable sash design

- For easy exterior cleaning



Unequal Lite



Equal Lite



## CASEMENT (CA540)

**Available in single vent or custom units**

- Hinged for opening either left or right

**Multi-point locking system**

- Provides added strength and security

**Washable and egress hinge options**

- For easy cleaning from inside the home

**Optional fold away handle**

- Will not interfere with your window treatments



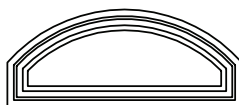
## PICTURE WINDOW / FIXED LITE ARCHITECTURAL (PW/AR520)

**Available in a variety of shapes & sizes**

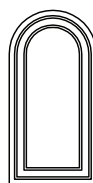
- Provides maximum amount of light
- Can serve as standalone or companion window



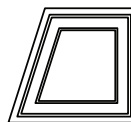
Half Circle



Eyebrow



Arch



Trapezoid

Other standard and custom shapes available.





## STANDARD FEATURES

Our Crystal Achievement Award-winning design comes standard with clear, tempered, laminated insulating glass and a white frame that is ideal for new construction and remodel projects. This sliding glass door is the perfect complement to all PGT® WinGuard® Vinyl windows.

### Standard Frame Colors



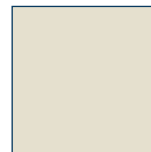
White

## PREMIUM OPTIONS

### Glass

- Privacy glass
  - Obscure (textured for enhanced privacy)
- Popular glass tints
  - Solarban® 60
  - Solarban® 70XL
- Argon gas

### Frame Colors



Beige



Bronze Exterior/  
White Interior

## SLIDING GLASS DOOR (SGD570)

### Expansions of up to 40 feet

- Amazing, uninterrupted views and a great source of natural light

### Panels up to 4' x 10' or 5' x 8'

- Sizes available for every opening

### By-pass and pocket door configurations

- Customizable with multiple tracks from 2 to 8 panels

### Dual-point locking mechanism

- Provides added security for your home by restricting panels from being lifted off the tracks

### Heavy-duty tandem rollers

- Allow easy opening with just your fingertips

### Hidden installation and assembly screws

- Deliver a sleek, finished appearance

### Raised pull handles or recessed pulls available

### High performance options

- Available to meet all your design pressure needs



Crystal Achievement  
Award-winning  
Design

**AAMA:** American Architectural Manufacturers Association. A national trade association that establishes voluntary standards for the window, door, storefront, curtain wall, and skylight industries.

**Argon gas:** Argon is a safe, odorless, colorless, non-toxic, non-flammable inert gas that is commonly used in place of air between the glass panes of an insulated Low-E glass unit to reduce temperature transfer.

**Balance:** A mechanical device used in hung windows to offset the weight of the sash.

**Balance shoe:** Hardware that connects the balance to the sash.

**Box screen:** A heavy duty sliding glass door screen frame that simulates the actual glass panels. It is typically similar in size and shape to the glass door panels.

**Corrosion-resistant:** Refers to how well a substance can withstand damage caused by oxidization or other chemical reactions.

**Cottage window:** On a hung window the sash lite is larger than fixed lite.

**Deglazing:** An effect of severe weather on windows, where the silicone glazing bead separates from the window pane, thus reducing the window's ability to restrict water from entering the structure and decreasing the strength of the overall window.

**Design load:** Wind load pressure, usually expressed in pounds per square foot (psf). Equal to 2/3 of the Structural Test Load.

**Design pressure:** See Design load.

**Egress hinge:** A hinge on the casement window that pivots closer to the corner and creates a greater clear opening.

**Energy Star:** ENERGY STAR® is an independent U.S. government program establishing a standard set of guidelines to recognize the energy efficiency of various products. ENERGY STAR® guidelines are used in conjunction with a variety of building materials, including windows and patio doors.

**Florida Product Approval:** A series of tests performed by a State of Florida approved testing lab to ensure certain building components meet Florida standards.

**Forced-entry resistance:** The test methods intended to establish a measure of resistance for window assemblies subjected to attacks, other than by impact.

**Heat-strengthened glass:** Glass that is reheated, after forming, to just below melting point, and then cooled, forming a compressed surface that increases its strength beyond that of typical annealed glass.

**Impact resistant:** Shatter-resistant glass, when the outer glass breaks the shattered pieces will adhere to an intermediate layer of a shatter-proof membrane.

**Insulating glass:** Window panes separated by an air or other gas filled space to reduce heat transfer.

**Interlayer:** A shatterproof membrane sandwiched between two panes of glass.

**International Building Code:** A model building code developed by the International Code Council that has been adopted throughout most of the United States.

**Laminated Insulating glass:** Comprised of three panes of glass: two panes bonded together with a strong, clear interlayer and one pane for added insulation.

**Large Missile Impact:** Test used on windows and doors in which a 9 lb 2x4 traveling at 50 ft per second is propelled at a speed of 34 mph into test subject.

**Lift rail:** A handhold for raising and lowering the sash. Rail implies that the handhold is continuous across the sash.

**Lite:** An area of visible light, framed by either a window or door's primary extrusions or by muntins.

**Low-E (Emissivity) glass:** Glass with a transparent metallic oxide coating applied onto or into a glass surface. The coating typically allows short-wave energy to pass through but reflects long-wave infrared energy which improves the U-value.

**Miami-Dade Notice of Acceptance:** Protocol for testing windows for impact by large or small missiles.

**Monolithic:** Referred to as single unit of glass (not insulated).

**Multiple chambered frame:** Frame member which has multiple core construction to provide strength and insulation.

**NFRC – National Fenestration Rating Council:** A non-profit organization which provides energy performance ratings on windows, doors, skylights, and attachment products.

**Obscure glass:** Glass that has been made translucent instead of transparent.

**Pocket door:** Sliding glass door that when opened slides clear of the opening.

**Prep:** Used in reference to holes that get bored or punched on a door.

**Sound Transmission Class (STC):** The sound transmission loss rating of a material over a selected range of sound frequencies. The higher the number, the less sound is transmitted.

**Super Spacer® nXt™:** An all-foam, warm edge spacer that lines the edge around the insulating glass panes. See page 14 for details about benefits.

**Tempered glass:** Treated glass that is strengthened by reheating it to just below the melting point and then suddenly cooling it. When shattered, it breaks into small pieces. Approximately four times stronger than standard annealed glass; is required as safety glazing in patio doors, entrance doors, side lights, and other hazardous locations. It cannot be recut after tempering.

**Ultra-violet (UV):** The invisible rays of the spectrum that are outside of the visible spectrum at its short-wavelength violet end. Ultraviolet rays are found in everyday sunlight and can cause fading of paint finishes, carpets, and fabrics.

**Vinyl:** A rigid or flexible material made of poly vinyl chloride material used in window and door frames and glazing.

**Washable hinges:** Track type hinges on casement windows that, aside from normal operation, have the ability to slide towards frame center and allow for easy sash cleaning.

