THE NATION'S

#1

IMPACT-RESISTANT
WINDOWS AND DOORS

PGT WinGuard® VINYL

VINYL IMPACT PRODUCT LINE

"The engineering advancements we've applied to this WinGuard product line allow us to offer larger sizes and higher design pressures—as well as our most beautiful profile ever."

— Ken Vanderbent, Lead Design Engineer

Designed to be even stronger and even more beautiful. Our new PGT® WinGuard® Vinyl products feature their most-attractive profile ever, with larger sizes capable of handling the highest design pressures. The new and improved WinGuard Vinyl still meets the toughest hurricane codes in the country. It still protects against flying debris, intruders, outside noise and UV rays. It's still everything you love about the nation's #1 brand of impact-resistant windows and doors—plus a whole lot more.

This is one product line that fits every need, so there's no reason to compromise. You can have the same great look and same robust construction throughout your home, in every frame small to large. It's just the latest breakthrough from the PGT design team, which is one of the largest and best teams in the industry. A team committed to the same high standards that span our manufacturing floor, that ride in our delivery trucks, and that continue on-site and off with unsurpassed service and support.

2 PERFORMANCE

4 TESTING

6 EFFORTLESS

8 INNOVATION

10 CUSTOMIZATION

12 THE WINGUARD® DIFFERENCE

16 PRODUCT OPTIONS

18 PRODUCT STYLES

24 GLOSSARY OF TERMS


SEE WHAT'S INSIDE



PERFORMANCE

Engineered to make shutters, plywood & hard work obsolete

PGT® WinGuard® Vinyl windows and doors provide continuous, effortless hurricane protection—as well as protection from intruders, UV rays and outside noise. No more wrestling with ugly, metal shutters. No more hanging even uglier plywood. Which means there's one more thing WinGuard® protects: the beauty of your home.

WinGuard Vinyl windows and doors feature:

- Laminated insulating glass to provide an all-in-one solution for continuous, effortless protection.
- A design that includes SecureConnect Technology (integrated corner keys), aluminum interlocks and multi-point locking systems to deliver impact performance in large sizes and with high design pressures.

No one knows more about impact-resistant products

PGT® is the authority on impact-resistant windows and doors. After Hurricane Andrew devastated South Florida and caused billions of dollars in damage, PGT worked with Miami-Dade County to establish new codes and testing protocols to give greater protection to people and property when the next storm hit. And so WinGuard was born—the first full suite of impact-resistant windows and doors. Since then, WinGuard has been among the strongest, safest and most-reliable products in the industry, and now we've made it even better.

PGT CUSTOM WINDOWS + DOORS

WinGuard® is the nation's leading impact-resistant window and door product line with over FOUR MILLION units installed — and ZERO reported impact failures.



TESTING

Windows & doors that pass with flying colors

You can be confident in our engineering. PGT® windows and doors are continuously tested and validated by the industry's most-respected accredited organizations. The certifications we earn are your assurance that our products will perform as expected.

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

- Miami-Dade Notice of Acceptance
- AAMA Tested/Keystone Certified
- Florida Product Approval
- International Building Code
- ENERGY STAR®
- National Fenestration Rating Council® (NFRC)
- Texas Department of Insurance
- STC (Sound Transmission Class)
- OITC (Outdoor-Indoor Transmission Class)
- Manufactured Housing (AAMA 1701)

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

Taking testing to another level

PGT has its own state-of-the-art testing lab, where we spend hundreds of hours analyzing and evaluating our products. Consider it extra assurance that the windows and doors you buy will deliver optimum performance for years to come.

PGT WinGuard Vinyl windows and doors are designed 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

PGT CUSTOM WINDOWS + DOORS

MIAMI-DADE COUNTY APPROVED

AAMA Proud Member

NFRC

Energy Star WE SELL ENERGY STAR

EFFORTLESS



Engineered to protect you from hurricanes & heavy lifting

When a storm threatens, others may have to wrestle shutters and hoist plywood, but not you. With PGT® WinGuard® Vinyl, you don't have to lift a finger. Each impact-resistant window and door features laminated insulating glass — a total of three panes. Two panes are bonded together with a strong, clear interlayer, providing the impact resistance. A third pane provides added insulation.

No shutters. No plywood. No storage. No heavy lifting. No wonder WinGuard is so popular.

Superior protection backed by a superior warranty

PGT® has a reputation for keeping promises. We're known for delivering when we say we will. We're known for products that do what we say they will. So it should come as no surprise that we also back our products with one of the best warranties in the industry.

PGT WinGuard Vinyl products include:

- Lifetime warranty on the frames
- Limited lifetime warranty on insulating glass component
- 10-year warranty on laminated glass component

PGT CUSTOM WINDOWS + DOORS

The interlayer and heavy-duty frame of WinGuard® Vinyl safeguards you against high winds and flying debris 24 hours a day, 7 days a week.



INNOVATION

Bigger sizes & higher design pressures

The new PGT® WinGuard® Vinyl represents an engineering breakthrough. While still meeting the toughest building codes in the nation, our windows and doors now also come in larger sizes that can achieve higher design pressures. In other words, the WinGuard® Vinyl line is complete. Even if your home design calls for a range of window sizes and high design pressures, the same frame construction can be used throughout for a clean consistent look. No need to mix and match.

PGT WinGuard Vinyl products feature:

- Larger sizes
- Higher design pressures
- A new, elegant profile
- SecureConnect Technology

Protection from high energy bills, too

PGT WinGuard Vinyl windows and doors also provide outstanding energy efficiency for lower heating and cooling bills. And there are options you can choose to lower those bills even more.

PGT WinGuard Vinyl windows and doors come standard with:

- Laminated insulating glass
- Multi-chambered, vinyl frames
- Warm-edge spacer technology

Options available to achieve ENERGY STAR® ratings for energy performance include:

- **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 windows.
- **Argon gas** which helps reflect outside heat to regulate the temperatures inside your home.

PGT CUSTOM WINDOWS + DOORS

ENERGY STAR® products are independently certified to save energy without sacrificing features or functionality. In order to earn the label, PGT® WinGuard® products are third-party certified based on testing in EPA-recognized laboratories.



CUSTOMIZATION

CUSTOM WINDOWS + DOORS

Tailored to your needs

No two projects are alike. That's why we customize every product to match your needs—to fit the exact specifications of your home. And no matter the size of the project, all PGT® products meet our strict standards of quality. Because your satisfaction and safety are our top priorities.

Made to your specifications

PGT® WinGuard® Vinyl products are available with a variety of custom choices including:

- Frame colors
- Hardware finishes
- Glass tints
- Grid styles, colors and patterns
- High-performance Low-E
- Privacy glass
- Sea Turtle Protection Code glass options

WINGUARD® VINYL BENEFITS

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.



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.



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.



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.

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



Laminated Glass Single Pane Glass

Glass Type Comparison

Glass breakage patterns can vary greatly depending on the treatment and construction of the glass used in a window or door. PGT 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.

WINGUARD® VINYL FEATURES



Impact-Resistant Laminated Insulating Glass

A glass makeup that features 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.

SecureConnect Technology

PGT's patented SecureConnect technology integrates proprietary-designed corner keys into the sash of each window. This design system ensures the integrity and performance of every window no matter how large or small.

ComfortLift Handles

PGT's ComfortLift handle provides fingertip operation when opening or closing the windows.

TrueHold Hinge

PGT's TrueHold hinge ensures that your Casement window, no matter how large, will maintain its smooth, effortless operation for years to come.

Aluminum Interlock

An integrated aluminum design feature that provides added strength and allows for larger sizes with higher design pressures.


Welded Frame Corners
Tilt Latch SecureConnect Technology
Welded Sash Corners
Pivot Bar SecureConnect Technology
Aluminum Interlock
Exterior Glazed Laminated Insulating Glass
ComfortLift Handles
Multi-Chamber Frame

PRODUCT OPTIONS



Grid Styles

Flat Grid

- 9/16" wide or 13/16" wide
- Grid between the glass



Contour Grid

- 1" wide
- Grid between the glass



Traditional Simulated Divided Lite

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

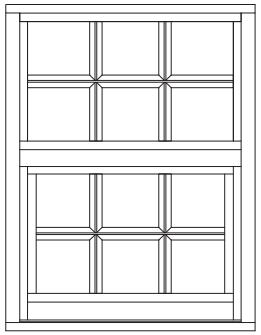
Standard Features

PGT® WinGuard® Vinyl windows and doors come standard with white frames and clear, laminated insulating glass. WinGuard® Vinyl door glass is also tempered for additional safety, and operable windows include a screen with 1816 mesh. All WinGuard Vinyl products are ideal for new construction and remodeling projects.

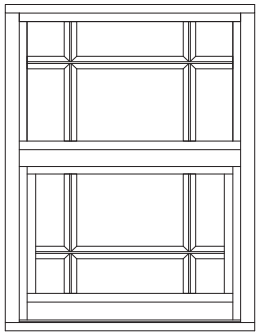
Standard Interior & Exterior Frame Colors

- White

Grid Patterns



Standard



Brittany/Prairie

Premium Options

Glass

- Tempered glass (for windows)
- Privacy glass
  - Obscure (textured)
  - White Interlayer (opaque interlayer)
- Popular glass tints
- High-performance Low-E
  - EnergyShield
  - EnergyShield Max
- Argon gas

Exterior Frame Colors

- Beige
- Bronze
- Anodize*
- Pebble Khaki*
- Hunter Green*
- Brick Red*

* Available with limited interior colors

Interior Frame Colors

- Beige
- Bronze
- Natural Oak
- Dark Oak
- Natural Cherry

WINDOWS



Single Hung



Double Hung

Single Hung (SH5500) and Double Hung (DH5560)

Constant force balance system

- Provides smooth, easy opening and closing

Spiral balance system

- Standard feature on larger window sizes ensures ease of sash operation
- Optional upgrade on any window size provides additional ease of sash operation

SecureConnect integrated corner keys

- For added sash strength

Tilt sash design

- For easy exterior cleaning

Embedded tilt latch

- For added strength in holding sash into frame
- Presents cleaner sight lines

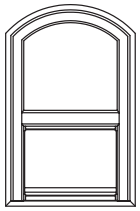
Stylish ComfortLift handles

- Allows ease of operation & option to add style by selecting hardware finish
- Optional lift rail for alternative opening method

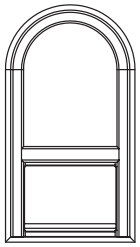
Beveled meeting rail

- Enhances visual appeal of profile

Configuration Options



Single Hung
Radius Top
with Equal Sash



Single Hung
Arch Top
with Proview/Oriel Sash

Cottage & custom sash configurations available

Horizontal Roller (HR5510)

Available in 2- and 3-lite configurations

SecureConnect integrated corner keys with wheel housing

- For added sash stability and strength
- Provides smooth, durable operation

Ball bearing wheel

- Provides smooth, durable operation and allows for larger sash sizes

SecureConnect integrated corner keys at lock rail

- Includes weather strip to prevent air infiltration

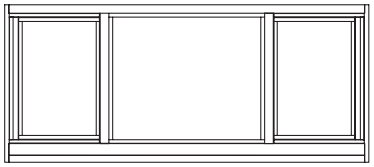
Removable sash design

- For easy exterior cleaning

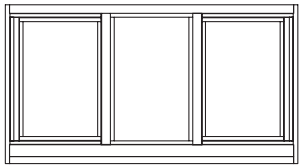
Concealed egress option

- Meets egress requirement of 1 operation to unlock window
- Sleek proprietary design and innovative operation

Configuration Options



Unequal Lite



Equal Lite



Horizontal Roller (2-Lite)



Horizontal Roller XOX (3-Lite)

WINDOWS



Casement

Casement (CA5540)

Available in single vent or custom units

- Hinged for opening either left or right

Multi-point locking system

- Provides added strength and security

Washable hinge

- Standard option for easy cleaning from inside the home

Egress hinge option

- Optional upgrade that meets egress requirement of 1 operation to unlock window

Nesting handle

- Will not interfere with your window treatments

TrueHold heavy-duty hinge

- Standard feature on larger window sizes ensures durability of sash operation
- Optional upgrade on any window size



Awning

Awning (AW5540)

Available in single vent or custom units

Multi-point locking system

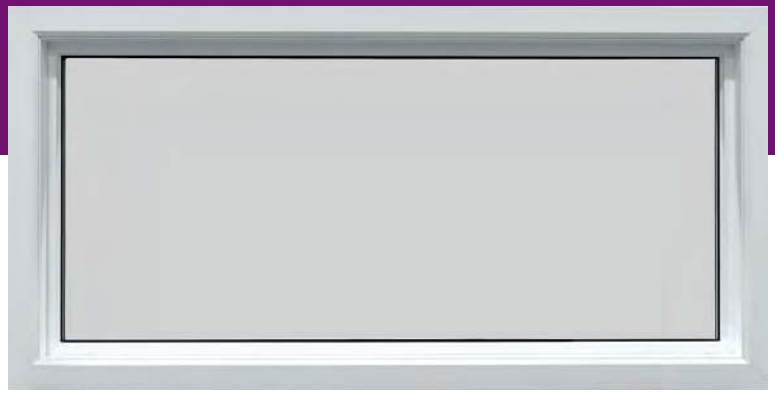
- Provides added strength and security

Washable hinge

- Standard option for easy cleaning from inside the home

Nesting handle

- Will not interfere with your window treatments



Picture Window

Picture Window / Fixed Lite Architectural (PW/AR5520)

Available in a variety of shapes & sizes

- Provides maximum amount of light
- Can serve as standalone or companion window
- 25 standard shapes or custom shapes available



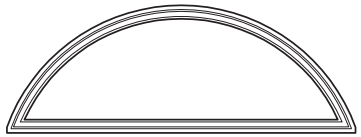
Casement Picture Window

Casement Picture Window / Fixed Lite Architectural (PW/AR5540)

Available in a variety of shapes & sizes

- Provides maximum amount of light
- Can serve as standalone or companion window
- To be used in conjunction with the Casement or Awning window for matching sight lines
- 25 standard shapes or custom shapes available

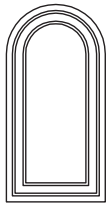
Popular Fixed Lite Architectural Shapes



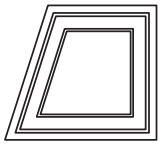
Half Circle



Eyebrow



Arch



Trapezoid

DOORS



Sliding Glass Door

Preferred Sliding Glass Door (SGD5570)

Crystal Achievement Award-winning design

- *"Most Innovative Door"*

Expansions of up to 40 feet

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

Panels up to 5' x 10'

- Sizes available for every opening

By-pass or pocket and 90° or 135° corner door configurations

- Customizable with multiple tracks from 1 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

Preferred French Door (FD5555)

Mechanically fastened corners
- For added strength & durability

Traditional panel joinery
- Enjoy the aesthetics and charm of a traditional wood door without the maintenance

Multi-point locking system
- Creates built-in anti-lift device to provide enhanced strength and security

Stainless steel hinges
- Corrosion resistant and provide smooth door operation

Conventional 4-9/16" frame depth
- Fits easily into openings without costly modifications

Solid cellular vinyl material
- Sounds and feels like solid wood



French Door

Glossary of Terms

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

AAMA 1701: A performance standard that sets the requirement for primary windows and sliding glass doors used in manufactured housing.

Argon gas: 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.

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.

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

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

ENERGY STAR®: 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.

Impact-resistant: Shatter-resistant glass. When the glass breaks, the shattered pieces will adhere to the intermediate shatterproof 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 9lb 2x4 traveling at 50ft per second is propelled at a speed of 34 mph into test subject.

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.

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

National Fenestration Rating Council (NFRC): 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.

Outdoor-Indoor Transmission Class (OITC): An integer rating that provides an estimate of the sound insulation performance of a façade or building element (such as a window or door) between outdoor and indoor spaces. The higher the number, the less sound is transmitted.

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): An integer rating that provides an estimate of the sound insulation performance of an interior building partition (such as a window or door) between indoor spaces. The higher the number, the less sound is transmitted.

Super Spacer® nXt™: An insulating, all-foam, dual-seal, warm-edge spacer that separates the two panes of glass in an insulating glass unit and seals the gas space between them.

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.

Texas Department of Insurance (TDI): A governing organization in Texas that reviews window and door products and approves that such products are tested and certified in accordance with their policies.

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.

Warm-edge spacer: An insulating spacer that separates the two panes of glass in an insulating glass unit and seals the gas space between them.

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.

Window Opening Control Device: A device that limits the opening of a window sash to a predetermined position. The device includes a release mechanism that shall allow the sash to be fully-opened and that automatically resets when a window is fully closed.

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 2,000 at its manufacturing facility in Venice, Florida.

Today, PGT offers a total of nine 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.

PGT®

CUSTOM WINDOWS + DOORS

CUSTOM WINDOWS + DOORS

©2017 PGT Custom Windows + Doors

7/17 MC0100452