



WINDSOR
WINDOWS & DOORS

PINNACLE IMPACT

Wood Clad Windows & Doors Rated for the Coast





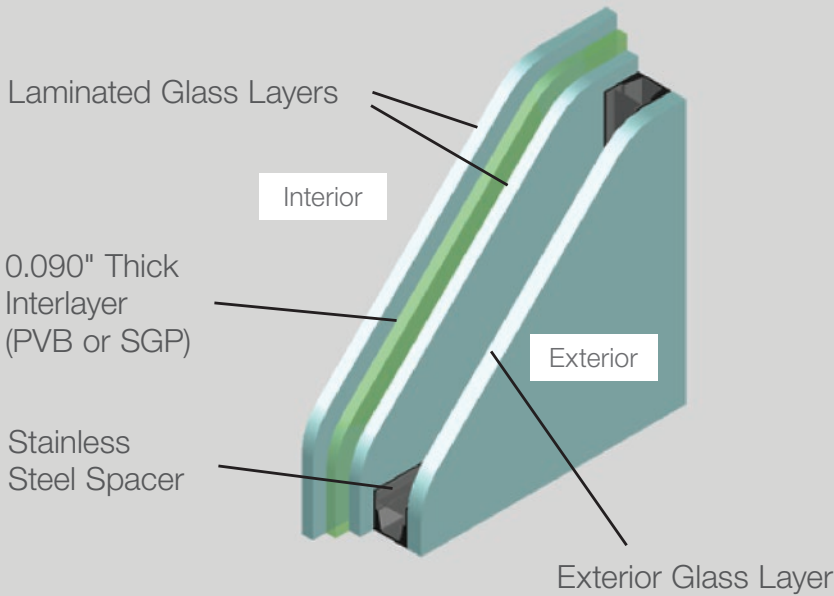
A Solution for Every Coastal Project

Windsor Windows & Doors offers a complete line of impact rated coastal products. Available in casement and awning, as well as several geometric shapes and patio door styles, Windsor’s impact products are manufactured to withstand the unique challenges of the coastal climate while maintaining their stunning beauty for years to come.

All Windsor impact products come standard with a robust, extruded aluminum sash, panels and frames, which will not dent or deform under even the most extreme coastal environments.

The powder coating applied to impact products is a durable AAMA 2605 finish, which is backed by a 30-year warranty. For applications within one mile of the coast, AAMA 2605 finish will carry a 10-year warranty. Impact products also utilize Cardinal Sea-Storm® laminated glass, designed specially to protect against the harshest wind, rain and flying debris.

Impact Insulated Sea-Storm® Glass	4
The Wonders of Wood	5
Pinnacle Product Overview	6-7
Impact Product Specifications	8
Turtle Glass Code	9
Options & Accessories	10-14



Impact Insulated

Sea-Storm[®] Glass

- Cardinal Sea-Storm[®] LoE 366 insulated glass (IG) is standard
- Laminated glass features Polyvinyl Butyral (PVB) inner-layer on units up to 26 square feet and SentryGlas[®] Plus (SGP) inner-layer on units over 26 square feet
- Laminated glass dampens sound from traffic and the outdoors and offers security against intruders
- Preserve[®] protective film is standard on all impact IG
- All impact IG units are glazed with structural silicone, the strongest silicone bonding agent available

Testing Standards

All Windsor Pinnacle impact products are tested to the following industry standard tests:

Test Type	Test Standard
Air/Water/Structural Gateway Test	AAMA_WDMA_GSA 101-IS2-A440
ASTM Impact Test	ASTM E1996, Method ASTM E1886 Large Missile D
HVHZ Test (Miami-Dade, Broward and Monroe counties in Florida)	TAS 201, 202, 203

Impact Zone Rating

All Windsor Pinnacle impact products are tested and certified to meet either Wind Zone 3 or Wind Zone 4 criteria.

Wind Zone 3

- Can sustain winds from 120 mph to 140 mph
- Tested for wind-borne debris from a 9 lb 2 x 4 shot from a cannon at 50 ft per second, one time
- 9000 positive and negative pressure cycle simulated the pressure differential of a hurricane

Wind Zone 4

- Can sustain winds greater than 140 mph
- Tested for wind-borne debris from a 9 lb 2 x 4 shot from a cannon at 50 ft per second, fired multiple times at the same unit
- 9000 positive and negative pressure cycle simulated the pressure differential of a hurricane



The Wonders of Wood

Pinnacle Select Casement and Awning

Pinnacle Select is an elite line of casement and awning windows available in crank-out, push-out and picture units, constructed from enhanced components for unsurpassed performance.

Pinnacle Casement and Awning

The narrow clean lines of Pinnacle casement and awning products offer maximum light, excellent ventilation and easy cleaning. Available in crank-out and picture units, these windows offer depth of design and narrow sitemlines and will provide beauty for years to come.

Pinnacle Double Hung

An attractive addition to your home, Pinnacle double hung windows tilt effortlessly for easy cleaning. The concealed jambliner system provides an enhanced appearance with visible wood in the interior and extruded aluminum on the exterior. Designed to meet impact performance without the use of unsightly clips on the interior or exterior.

Pinnacle Direct Set and Radius

Want to be unique and outstanding? Pinnacle direct set and radius units can be customized in an array of shapes and sizes to suit your home and personality. Direct sets offer two unique styles. Standard direct sets provide an in-sash appearance while low profile direct sets come with a low profile frame providing maximum glass area.

Pinnacle Sliding Patio Doors

French stiles and rails provide the strength needed to withstand hurricane force winds. Available in one, two and four panel configurations, Pinnacle French sliding patio doors provide ease of operation and aesthetics.

Pinnacle Swinging Patio Doors

Available in in-swing and out-swing, Pinnacle swinging patio doors come standard with multi-point locking hardware for added security. Available with French stiles and rails in one and two panel configurations, Pinnacle swinging doors are customizable with an infinite number of options.



Pinnacle Select Crank-out Casement and Awning

A robust 2-3/16" thick, double mortise and tenon sash adds dimension, strength and stability. Stainless steel dual arm operator and multi-point locking system provide a sleek look and easy operation. Certified to Wind Zone 3 and Wind Zone 4 / HVHZ with maximum operating casement sizes up to 36" x 84", awning sizes up to 60" x 48", and picture sizes up to 48" x 96" and 72" x 72".

Pinnacle Select Push-Out Casement and Awning

Select push-out casements and awnings use the same robust sash as crank-out casements and awnings. The push-out hardware consists of an easy to operate lever with adjustable cam rollers and keepers. Certified to Wind Zone 3 and Wind Zone 4 / HVHZ with maximum operating casement sizes up to 36" x 84", awning sizes up to 60" x 48", and picture sizes up to 48" x 96" and 72" x 72".

Pinnacle Casement and Awning

Low profile sash offers maximum daylight and clean narrow lines. Stainless steel dual arm operator and multi-point locking system provide a sleek look and easy operation. Certified to Wind Zone 3 with maximum operating casement sizes up to 36" x 72" (30" x 72" certified to Wind Zone 4), awning sizes up to 48" x 36", and picture sizes up to 48" x 72" (certified to Wind Zone 4).



Pinnacle Double Hung

Full sized inverted block and tackle balance system provides support for heavier sash weights. Concealed jambliner allows for species matched interior and color matched extruded aluminum exterior covers for improved aesthetics. Certified to Wind Zone 3 and Wind Zone 4 / HVHZ with maximum operating sizes up to 41.375" x 88.75", and picture sizes up to 49.375" x 96.75" and 73.375" x 76.75".

Pinnacle Direct Set and Radius

With options of a 1-1/4" thick frame on standard direct set or a 3/4" thick frame on low profile direct set and radius units, you can let your imagination run wild with an unlimited array of geometric and radius shapes. Certified to Wind Zone 3 and Wind Zone 4 / HVHZ with maximum sizes for both the standard direct set and low profile direct set and radius up to 60" x 120".



Pinnacle French Sliding Patio Door

LVL French stiles incorporate strength and stability while two tandem, heavy-duty end-adjustable rollers provide years of smooth, trouble-free operation. Pinnacle impact French sliding patio doors provide protection against anything Mother Nature can throw at them. Certified to Wind Zone 3 with maximum sizes for 2-panel doors up to 75.063" x 98.5" and 4-panel doors up to 188.563" x 98.5".

Pinnacle French In-swing and Out-swing Patio Doors

In-swing and out-swing patio doors utilize the same LVL stile used in the Pinnacle French sliding patio door to provide strength and stability for both styles of swinging doors. Standard stainless steel multi-point hardware and an adjustable hinge system provide effortless adjustment and operation.

In-swing – Certified to Wind Zone 3 with maximum size up to 75.063" x 95.375".

Out-swing – Certified to Wind Zone 3 and Wind Zone 4 / HVHZ with maximum sizes up to 75.063" x 98.5".

Impact Product Specifications

Series	Product Type	WZ 3	WZ 4	HVHZ	Frame Width Tested (in)	Frame Height Tested (in)	PG Rating	+DP (psf)	-DP (psf)
Pinnacle Select	Pinnacle Select Casement Crank-Out	Y	Y	Y	36	72	LC-PG65-C	65	65
		Y	Y*	N	36	84	LC-PG50-C	50	50
		Y*	Y*	Y*	36	84	CW-PG65-C	65	65
	Pinnacle Select Awning Crank-Out	Y	Y	Y	60	48	LC-PG65-AW	65	65
	Pinnacle Select Casement Push-Out	Y	Y	N	36	84	LC-PG50-C	50	50
		Y*	Y*	Y*	36	84	CW-PG65-C	65	65
	Pinnacle Select Awning Push-Out	Y	Y	Y	60	48	LC-PG65-AW	65	65
	Pinnacle Select Casement Fixed	Y	Y	Y	48	96	LC-PG65-FW	65	65
Y		Y	Y	72	72	LC-PG65-FW	65	65	
Pinnacle Clad	Pinnacle Casement Crank-Out	Y	Y	N	30	72	R-PG65-C	65	65
		Y	N	N	36	72	LC-PG50-C	50	50
		Y	N	N	36	72	LC-PG50-C	50	50
	Pinnacle Awning Crank-Out	Y	N	N	48	36	R-PG50-AW	50	50
	Pinnacle Casement Fixed	Y	Y	N	48	72	R-PG65-FW	65	65
	Pinnacle Double Hung	Y	N	N	37.375	76.75	LC-PG50-H	50	50
		Y*	Y*	Y*	41.375	88.75	LC-PG50-H	50	65
	Pinnacle Double Hung Picture	Y	Y	Y	49.375	96.75	CW-PG50-FW	50	65
		Y	Y	Y	73.375	76.75	CW-PG50-FW	50	65
	Pinnacle Standard Direct Set	Y	Y	Y	60	120	CW-PG65-FW	65	65
	Pinnacle Low Profile Direct Set / Radius	Y	Y	Y	60	120	CW-PG65-FW	65	65
	Pinnacle Sliding Patio Door (2-Panel)	Y	N	N	95.5	98.5	R-PG50-SD	50	50
	Pinnacle Sliding Patio Door (4-Panel)	Y	N	N	188.563	98.5	R-PG50-SD	50	50
	Pinnacle In-swing Patio Door (Single Panel)	Y	N	N	75.063	95.375	R-PG50-SHD	50	50
	Pinnacle In-swing Patio Door (Bi-Hinge)	Y	N	N	75.063	95.375	R-PG40-SHD	50	50
	Pinnacle Out-swing Patio Door (Single Panel)	Y	Y*	Y*	75.063	98.5	R-PG50-SDH	50	65
Pinnacle Out-swing Patio Door (Bi-Hinge)	Y	Y*	Y*	75.063	98.5	R-PG50-SHD	50	65	

* Requires HVHZ Upgrade

All Windsor impact products are approved for three installation methods:

- **Rigid Nail Fin** – This is a factory applied continuous aluminum nailing flange with an extruded aluminum drip cap.
- **Through the Frame** – This method uses screws applied through the impact unit frame into the structural wall framing.
- **Installation Clips** – Galvanized steel clips with interior and exterior fastener flanges are field applied to the window or door unit frame and fastened to the wall structure.

Windsor impact products offer an array of approved mulling options:

- **Wind Zone 3 Mulling Options** – Most mull configurations qualify using standard (zero) mulls up to and including 4" spread mulls.
- **Wind Zone 4 and HVHZ Mulling Options** – Most mull configurations qualify using 1" to 4" spread mulls.
- Field mulling configurations using steel or stainless steel are approved through the FloridaBuilding.org website. Accessory interior and exterior mull covers are available for field mulling applications.
- Mullion DP performance charts are available at www.windsorwindows.com.



Turtle Glass Code

The Turtle Code is an ordinance to protect sea turtles along the coastline during nesting season by restricting the amount of light allowed to pass through windows and doors. Newly hatched sea turtles are guided to move to the water by the light of the shining moon. The artificial light passing through windows and doors can confuse the newborn hatchlings and cause them to travel away from the water toward the artificial light.

The chart below shows the various glass options available requiring the 0.45 Visible Light Transmittance value or less for glass used in Windsor products. The glass options highlighted comply with the Sea Turtle Protection Code.

	Visible Light Transmittance	
	Insulated	Insulated Laminated/Impact
Grey Tint		0.40
LoE 240	0.40	0.39
LoE 366/Bronze Tint		0.39
LoE 366/Grey Tint	0.43	0.31

Glass values are center of glass

Options & Accessories

Finishing touches to perfect your vision. Windsor does more than just create durable, high-performance windows and doors. We pay attention to every detail and offer a wide array of options and finishes to match any décor. Flashy and eye-catching or simple and understated, our hardware, finishes, grille options, cladding colors, glass options and trim options complete the perfect window and door package.

Windsor's in-house powder paint application can help you make a statement with your windows and doors. Choose from over 43 shades in our standard and feature color palettes, or make it truly unique with custom color matching. All paints are protected with the highly durable AAMA 2605 finish.*¹

*AAMA 2605 finish backed by a 30-year warranty. ¹For applications within one mile of the coast, AAMA 2605 finish will carry a 10-year warranty. For specific warranty details, please refer to the complete warranty document posted on our website, www.windsorwindows.com.

STANDARD CLAD COLORS Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

Available in AAMA 2605 finish.

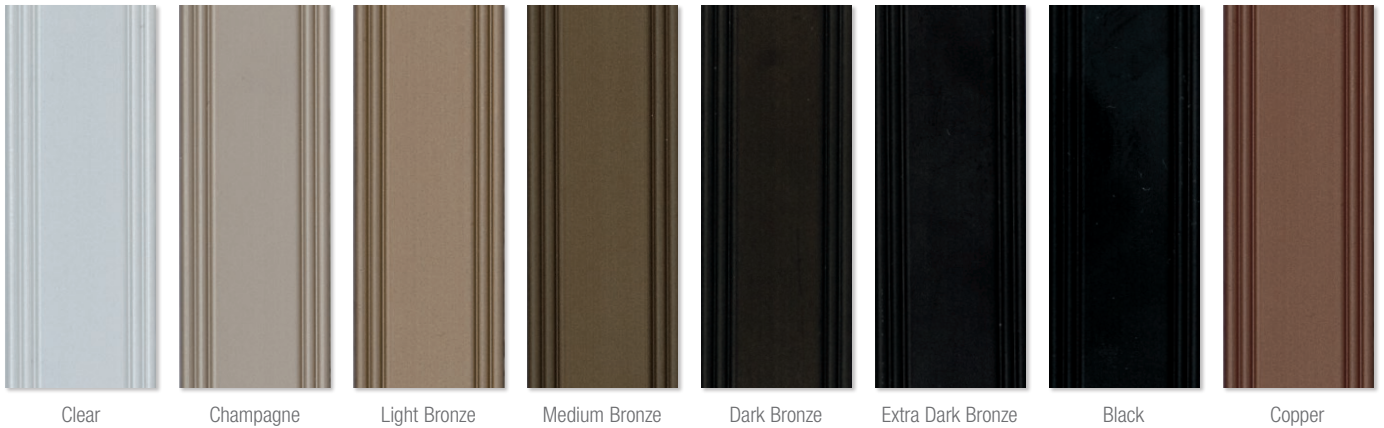


FEATURE CLAD COLORS Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

Available in AAMA 2605 finish. (Custom color matching is also available)



ANODIZED FINISHES* Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

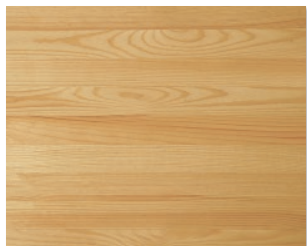


*Anodized finishes carry a 5-year standard warranty. For applications within one mile of the coast, anodized finishes will have no warranty.

INTERIOR FINISHES Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

Other wood species available through custom product request.

Interior Wood Species



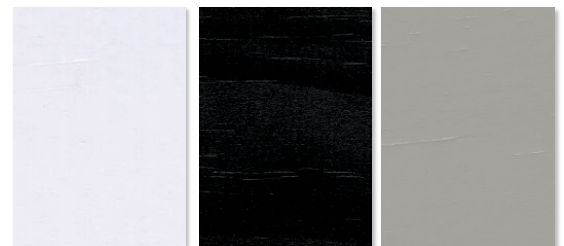
Clear Select Pine

Interior Primed Finishes



White Primed* Black Primed*
(*Available in Clear Select Pine only)

Prefinished Painted Interiors



Painted White Painted Black Painted Gray

Prefinished Stained Interiors Clear coat and stain samples are shown on Clear Select Pine and represent options available. Actual finish may vary.



Clear Sunlight Provincial Tea with Milk Antique Barrel Perfect Brown Intensive Chestnut Espresso



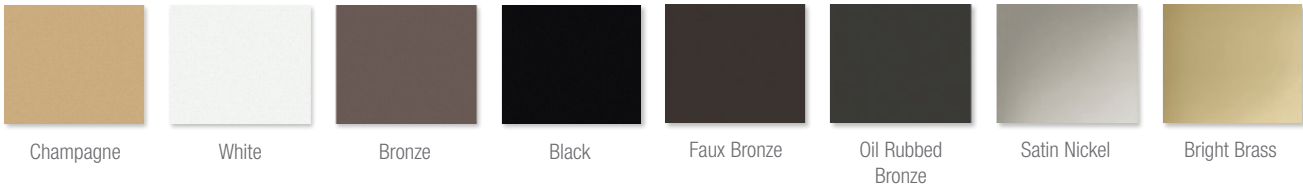
WINDOW HARDWARE AND FINISHES Pinnacle Windows



Casement/Awning Crank



Double Hung Lock



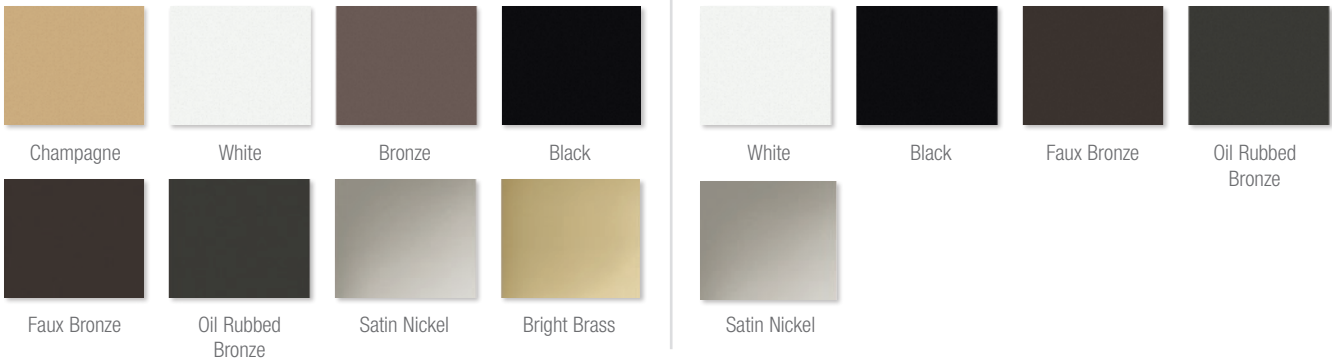
WINDOW HARDWARE AND FINISHES Pinnacle Select Windows



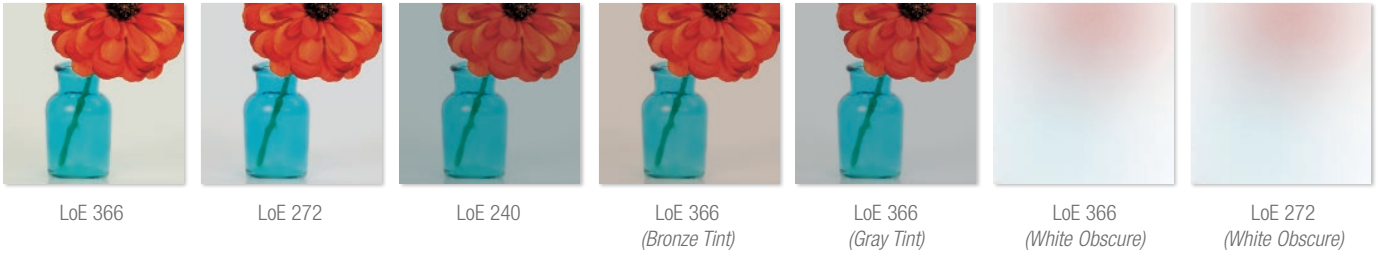
Casement/Awning Crank



Push-out (Lever)



GLASS



GRILLES Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

All of our wood and cellular PVC (CPVC) Windsor Divided Lite bars are hand-fitted to ensure a perfect fit.



7/8" & 1-1/4"
Perimeter Grille



7/8" & 1-1/4"
Stick Grille



3/4" & 1"
Profiled Inner Grille



13/16" Flat Inner Grille
(Not available on Select)



7/8" & 1-1/4"
Exterior Clad Ogee
Windsor Divided Lite



5/8", 7/8", 1-1/4" & 2"
Tall Putty
Windsor Divided Lite



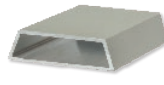
5/8", 7/8", 1-1/4" & 2"
Short Putty
Windsor Divided Lite



5/8", 7/8", 1-1/4" & 2"
Short Tall and Short
Contemporary Windsor
Divided Lite



5/8", 7/8", 1-1/4" & 2"
Tall Interior Contemporary
Windsor Divided Lite



2" Tall Putty
Simulated Check Rail



2" Exterior Low Profile
Simulated Check Rail



3-3/8"
Simulated Mid Rail

EXTERIOR TRIM Pinnacle Windows | Pinnacle Select Windows | Pinnacle Patio Doors

Clad Exterior Casing Options



WM 180 Brickmould



WM 180 Solid Back
Brickmould



Williamsburg



3-1/2"
Flat



3/8" Subsill



1-1/4" Subsill



2-1/4" Subsill

PATIO DOOR HANDLES AND FINISHES Pinnacle

Finishes marked with asterisks* feature a clear coating that protects the finish against tarnish and peeling. This process extends the rich, bright life of the finish and dramatically delays the aging process.

The following finishes are recommended for coastal use for swinging and sliding patio doors: Brushed Chrome, Polished Chrome, Satin Nickel and Brass. Antique Nickel is recommended for coastal use on swinging doors only.



Classic Swinging Patio Door Handle

		
White	Brushed Chrome*	Polished Chrome*
		
Satin Nickel*	Antique Nickel*	Brass*
		
Antique Brass	Faux Bronze	Oil Rubbed Bronze
		
Black		



Euro Swinging Patio Door Handle

Contemporary Swinging Patio Door Handle

Bi-fold doors are available with the contemporary swinging handle in Satin Nickel, Brass and Oil Rubbed Bronze.



Contemporary Sliding Patio Door Handle

		
White	Brushed Chrome*	Polished Chrome*
		
Satin Nickel*	Antique Nickel	Brass*
		
Antique Brass	Faux Bronze*	Oil Rubbed Bronze
		
Black		



Euro** Sliding Patio Door Handle



Flush mount Multi-slide and Sliding Patio Door Handle

**Coming Spring 2021 (Not available in Antique Nickel)





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Windsor Windows & Doors is an ENERGY STAR® partner and an NFRC and WDMA member. Windsor products are certified and labeled according to the guidelines established by the National Fenestration Rating Council (NFRC).