



WINDOWS & PATIO DOORS



A WHOLE NEW POINT OF VIEW.

It's more than a window. It's a whole new point of view. At Ply Gem Windows & Doors, we have a different view for the way the window business should be run. We believe you should have access to all the top quality styles and brands across the country. That's why we've taken our entire portfolio of brands, brands you know and trust, and given them one name – Ply Gem Windows & Doors. With this one name come a lot of big advantages, starting with a national manufacturing and distribution network. Pair that with our commitment to customer service, sustainable practices and wide variety of window styles that fit all your design needs, and you'll get the right window for every project and every budget.

And, because we're part of the Ply Gem family, you know you'll always have access to leading brands. Windows, doors, siding and accessories, stone veneer, fence and rail, rainware, shutters and designer accents, we have something for every project. We work with residential builders, remodelers, architects, distributors and dealers to help build sales. When you combine 75 years of experience, industry-leading customer service, and trusted local relationships, you've got a company you can count on. **Ply Gem. Building products. Building success.** 





WINDOWS & PATIO DOORS

#### TABLE OF CONTENTS

Double Hung	6
Casement & Awning	8
Casement Operating Shapes	10
French Sliding Patio Door	12
Bi-Parting Sliding Patio Door	14
Hinged Patio Door	16
French Outswing Patio Door	20
French Inswing Patio Door	

NFRC Thermal Performance Data	24
Explanation of Glass Packages	25
Low-E & ENERGY STAR <sup>®</sup> Information	26
Glass Options, Screens & Impact Product Information	27
Grille Patterns & Grille Styles	28
Exterior Color Options	29
Exterior Casing Options and Architectural Shapes	
Window Hardware Options and Door Hardware Options	31



Not all windows are created equal. Windows are a reflection of style and a reflection of luxury. Make the best possible statement with Ply Gem MIRA Aluminum-Clad Wood Windows & Doors. Designed with exquisite craftsmanship and oneof-a-kind details, MIRA windows and doors can help you bring your unique vision to life. And, because it's a Ply Gem window or door, you can take comfort in knowing that it's built with energyefficiency and long-lasting quality in mind.



A WHOLE NEW POINT OF VIEW.

## **DOUBLE HUNG**

#### MIRA ALUMINUM-CLAD WOOD DOUBLE HUNG

windows feature tilt-in sashes to make cleaning a breeze, weatherstripping for air-tight performance, and cam-action sash locks for added security. A wide bottom rail, 14° sloped sill and sturdy 6/4 sash construction help create a historically accurate design while delivering superior performance.

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## DOUBLE HUNG





#### STANDARD FEATURES

- I Tilt-in sash design for easy cleaning from the safety of inside your home
- 2 Sash interlock provides superior structural performance
- 3 Stepped jambliner design for superior structural performance while maximizing available daylight opening
- 4 Three-piece jambliner allows for different interior and exterior jambliner colors
- 5 6/4 sash construction for historically accurate wood window look
- 6 4<sup>9</sup>/16" jambs made of clear wood eliminate extensive drywall work
- 7 Sash and interior made with select clear wood; ready for paint or stain to match any interior décor
- 8 Integral face groove allows for easy mulling and exterior accessory application
- 9 Pre-punched nailing fin for simple installation
- **10** AAMA 2604 paint finish provides superior resistance to chalking and fading
- 11 Energy-efficient Warm Edge insulating HP glass helps reduce energy costs and fabric fading – optional HP<sup>SC</sup>, HP2+, HP2+<sup>SC</sup>, HP<sup>PS</sup> or HP2+<sup>PS</sup>
- **12** Vacuum-treated, solid wood components resist damage from water and fungus
- **13** Durable .050 extruded aluminum cladding on all exterior frame surfaces resists dings and dents while providing structural integrity



One-piece, full 4<sup>9</sup>/<sub>16</sub>" В Accessory grooves head and side jambs for mulling and casing with inside stop blind application, screen pocket nailed to reduce the in head and sill for springnumber of visible loaded screen nail holes Water Е D management Aluminum sash system for Flush-mounted tilt latches and lock and interlock provides increased keeper with matching finish fasteners superior structural water create a clean, high-quality appearance performance performance



MIRA ALUMINUM-CLAD WOOD CASEMENT & AWNING windows

are proof that structural integrity and high performance can be beautiful. They feature a recessed sash, a sleek, fold-down handle that does not interfere with window treatments, and a 90° opening sash providing maximum air flow and easy cleaning. All this, while providing superior resistance to water and air infiltration.







### STANDARD FEATURES

- 1 90° opening sash for greater airflow and easy cleaning
- 2 Sleek fold-down crank handle minimizes interference with window treatments
- **3** 6/4 sash construction for historically accurate wood window look
- 4 4<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 5 Sash and interior made with select clear wood; ready for paint or stain to match any interior décor
- 6 Integral face groove allows for easy mulling and exterior accessory application
- **7** Pre-punched nailing fin simple installation
- 8 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 9 Energy-efficient Warm Edge insulating HP glass helps reduce energy costs and fabric fading
- 10 Vacuum-treated, solid wood components resist damage from water and fungus
- **11** Durable .050 extruded aluminum cladding on all exterior surfaces resists dings and dents while providing structural integrity
- 12. Stainless steel hardware





1. HP glass combines Low-E with argon gas fill for high performance. 2. Optional Warm Edge+ spacer system for enhanced performance. 3. Standard option. 4. Impact Rated units are available in select sizes and configurations.

## CASEMENT OPERATING SHAPES

#### MIRA ALUMINUM-CLAD WOOD OPERABLE SHAPES

from Ply Gem Windows & Doors offers exceptional craftsmanship and detail to meet your unique vision of home. Expand your design options with operable casements in extended eyebrow, extended quarter eyebrow, extended round and extended quarter round shapes. MIRA operable shape casement windows combine luxury and performance for the ultimate custom look.

## CASEMENT OPERATING SHAPES







Extended Round Units (Standard Hub and Spoke Grille Pattern)





Extended Eyebrow Units (Standard Colonial Grille Pattern)









## FRENCH SLIDING PATIO DOOR

MIRA ALUMINUM-CLAD WOOD FRENCH SLIDING PATIO DOORS offer timeless style in a space-saving sliding configuration. This premium patio door features full-perimeter weatherstripping for air-tight performance and adjustable rollers for smooth operation. A standard multi-point lock system adds enhanced security. Beauty and performance never looked so good.

## FRENCH SLIDING PATIO DOOR





#### STANDARD FEATURES

- Stainless steel rollers for smooth operation and longlasting performance
- 2 Aluminum sill deck in medium bronze with durable stainless steel track on interior of sill for smooth sliding operation
- **3** Dual finseal weatherstripping over the full height of the door and 1/2" tall finseal weatherstripping for increased protection against leaks for reduced air infiltration
- 4 2-point locking system
- 5 1¾" panels with wide stile: and rails for a true French look
- 6 4<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 7 Select clear wood ready for paint or stain to match any interior décor
- 8 Integral face groove allows for easy mulling and exterior accessory application

- **9** Pre-punched nailing fin for simple installation
- **10** AAMA 2604 paint finish provides superior resistance to chalking and fading
- 11 Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading – optional HP<sup>SC</sup>, HP2+, HP2+<sup>SC</sup>, HP2<sub>MAX</sub>, HP2<sub>MAX</sub><sup>SC</sup>, HP3<sub>MAX</sub> or HP3<sub>MAX</sub><sup>SC</sup>
- 12 Vacuum-treated, solid wood components resist damage from water and fungus
- 13 Durable .050 extruded aluminum cladding on exterior surfaces of frame and .080" on panels resists dings and dents while providing structural integrity











**BI-PARTING SLIDING PATIO DOOR** 



#### MIRA ALUMINUM-CLAD WOOD BI-PARTING PATIO

**DOORS** are the perfect option for transitional living. The door provides a large opening for movement into and out of your home. This premium patio door features full-perimeter weatherstripping for air-tight performance and adjustable rollers for smooth operation. A standard multi-point lock system adds enhanced security. Beauty and performance and an expansive opening never looked so good.

## **BI-PARTING SLIDING PATIO DOOR**





#### STANDARD FEATURES

- and long lasting performance
- Aluminum sill deck in medium steel track on interior of sill for smooth sliding operation
- **3** Dual finseal weatherstripping over the full height of the weatherstripping for increased protection against leaks for reduced air infiltration
- Durable .080 extruded 4 aluminum cladding on exterior extruded aluminum cladding on frames resists dings and dents while providing structural integrity
- 5 Multi-point lock system

- 6 1<sup>3</sup>/<sub>4</sub>" panels with wide
- Select clear wood interior ready for paint interior décor (also available primed or prefinished in white, black or off-white)
  - allows for easy mulling and exterior accessory application
- Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading
- 10 AAMA 2604 paint finish provides superior resistance to chalking and fading











Hollow and foam filled bulb weatherstripping for increased protection

## HINGED PATIO DOOR

#### MIRA ALUMINUM-CLAD WOOD HINGED

**PATIO DOORS** elevate elegance and performance to a new level. The historically accurate styling of these doors is designed to let tradition reign. With Warm Edge insulating Low-E glass and argon gas fill plus full-perimeter weatherstripping, our attention to energy-efficiency is unmatched, while details like 1½" center mulls mean these doors are as sturdy as they are beautiful.





#### STANDARD FEATURES

- 1 Adjustable hinges standard for smooth operation. Flat hinges optional.
- 2 Center mull is integrated into the sill design for higher structural performance
- **3** Full-perimeter weatherstripping for air-tight performance and smooth operation
- 4 Multi-point lock system

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- 5 1¾" panels with wide stiles and rails for a true French look
- 6 4<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 7 Select clear wood ready for paint or stain to match any interior décor
- 8 Integral face groove allows for easy mulling and exterior accessory application

- **9** Pre-punched nailing fin for simple installation
- 10 AAMA 2604 paint finish provides superior resistance to chalking and fading
- Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading – optional HP<sup>sc</sup>, HP2+, HP2+<sup>sc</sup>, HP2max, HP2max<sup>sc</sup>, HP3max or HP3max<sup>SC</sup>
- 12 Vacuum-treated, solid wood components resist damage from water and fungus
- 13 Durable .050 extruded aluminum cladding on exterior surfaces of frame and .080" on panels resists dings and dents while providing structural integrity. Available with ADA compliant sill









## HINGED PATIO DOOR

#### MIRA ALUMINUM-CLAD WOOD HINGED PATIO

**DOORS** are available in half-lite and three-quarter-lite panels. Single panel, two-panel, three-panel and four-panel configurations can be made to fill your unique designs needs to create the look that reflects your style and matches your décor.





## FRENCH OUTSWING PATIO DOOR

#### MIRA ALUMINUM-CLAD WOOD FRENCH

OUTSWING PATIO DOORS provide classic style coupled with unbeatable performance. This high-quality, aluminum-clad wood patio door features adjustable hinges for smooth operation. Warm edge insulating Low-E glass and argon gas fill, double weatherstrip sealing and a bumper sill provide extra energyefficiency, while wide stiles and rails give you a true French look.

## FRENCH OUTSWING PATIO DOOR





#### STANDARD FEATURES

- 1 Adjustable hinges standard for smooth operation. Ball Bearing flat hinges optional
- 2 Handle activated shoot bolts at head and sill for added security
- **3** Aluminum sill deck to prevent sag and resist dents
- 4 Aluminum astragal with stainable wood interior
- 5 Full-perimeter weatherstripping for air-tight performance and smooth operation
- 6 Multi-point lock system
- 7 1¾" panels with wide stiles and rails for a true French look
- 8 4<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 9 Select clear wood ready for paint or stain to match any interior décor

- **10** Integral face groove allows for easy mulling and exterior accessory application
- **11** Pre-punched nailing fin for simple installation
- 12 AAMA 2604 paint finish provides superior resistance to chalking and fading
- Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading – optional HP<sup>SC</sup>, HP2+, HP2+<sup>SC</sup>, HP2MAX, HP2MAX<sup>SC</sup>, HP3MAX or HP3MAX<sup>SC</sup>
- 14 Vacuum-treated, solid wood components resist damage from water and fungus
- 15 Durable .050 extruded aluminum cladding on exterior surfaces of frame and .080" on panels resists dings and dents while providing structural integrity. Available with ADA compliant sill









Integral face groove allows for easy mulling and exterior accessory application

С





Multi-point lock system; multi-point locking hardware with stainless steel faceplates

В

Locking flush bolts at the head and sill for increased structural performance and security



Bulb weatherstripping and wept sill for increased protection against leaks

1. HP glass combines Low-E with argon gas fill for high performance. 2 Available option. 3. Impact Rated units are available in select sizes and configurations.

## FRENCH INSWING PATIO DOOR

### MIRA ALUMINUM-CLAD WOOD FRENCH

**INSWING PATIO DOORS** provide classic style and unbeatable performance. These doors feature wide stiles and rails coupled with 1¾" door panels to give you a true French look. Adjustable hinges allow for smooth operation, while Warm Edge Low-E insulating glass and argon gas fill, plus full-perimeter weatherstripping keep you comfortable in any season.

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AN STREET

## FRENCH INSWING PATIO DOOR





### STANDARD FEATURES

- Adjustable hinges are standard for smooth operation
- 2 Handle activated shoot bolts at the head and sill for added security
- **3** Aluminum sill deck to preven sag and resist dents
- **4** Aluminum astragal with stainable wood interior
- 5 Full-perimeter weatherstripping for air-tight performance and smooth operation
- 6 Multi-point lock system
- 7 1¾" panels with wide stiles and rails for a true French look
- 8 4<sup>9</sup>/16" jambs made of clear wood eliminate extensive drywall work
- 9 Select clear wood ready for paint or stain to match any interior décor

- **10** Integral face groove allows for easy mulling and exterior accessory application
- **11** Pre-punched nailing fin for simple installation
- 12 AAMA 2604 paint finish provides superior resistance to chalking and fading
- **13** Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading – optional HP<sup>SC</sup>, HP2+, HP2+<sup>SC</sup>, HP2<sub>MAX</sub>, HP2<sub>MAX</sub><sup>SC</sup>, HP3<sub>MAX</sub> or HP3<sub>MAX</sub><sup>SC</sup>
- 14 Vacuum-treated, solid wood components resist damage from water and fungus
- 15 Durable .050 extruded aluminum cladding on exterior surfaces of frame and .080" on panels resists dings and dents while providing structural integrity. Available with ADA compliant sill













## NFRC THERMAL PERFORMANCE DATA

DOUBLE HUNG				
		NF		ED
	R Value	U Factor	SHGC	VT
	WITH WA	RM EDGE		
<sup>3</sup> / <sub>4</sub> " HP	2.70	0.37	0.28	0.51
<sup>3</sup> / <sub>4</sub> " HP <sup>sc</sup>	3.03	0.33	0.21	0.40
<sup>3</sup> / <sub>4</sub> " HP <sup>PS</sup>	2.94	0.34	0.42	0.51
<sup>3</sup> / <sub>4</sub> " HP2+	3.33	0.30	0.27	0.49
<sup>3</sup> / <sub>4</sub> " HP2+ <sup>sc</sup>	3.33	0.30	0.20	0.39
<sup>3</sup> / <sub>4</sub> " HP2+ <sup>PS</sup>	N/A			
	WITH WAR	RM EDGE+		
<sup>3</sup> / <sub>4</sub> " HP	3.13	0.32	0.28	0.51
<sup>3</sup> / <sub>4</sub> " HP <sup>sc</sup>	3.13	0.32	0.21	0.40
<sup>3</sup> / <sub>4</sub> " HP <sup>PS</sup>	3.13	0.32	0.42	0.51
<sup>3</sup> /4″ HP2+	3.45	0.29	0.27	0.49
<sup>3</sup> / <sub>4</sub> " HP2+ <sup>sc</sup>	3.45	0.29	0.20	0.39
<sup>3</sup> / <sub>4</sub> " HP2+ <sup>PS</sup>	N/A			

CASEMENT					
		NFRC CERTIFIED			
	R Value	U Factor	SHGC	VT	
	WITH WA	RM EDGE			
<sup>7</sup> ∕₃″ HP	3.13	0.32	0.27	0.48	
7∕8″ HPsc	3.13	0.32	0.20	0.38	
7∕8″ <b>HP</b> ⁵	3.13	0.32	0.40	0.49	
7∕₃″ HP2+	3.57	0.28	0.26	0.47	
<sup>7</sup> ∕ <sub>8</sub> ″ HP2+ <sup>sc</sup>	3.57	0.28	0.19	0.37	
	WITH WAR	RM EDGE+			
7∕₃″ HP	3.33	0.30	0.27	0.48	
7∕₃″ <b>HP</b> <sup>sc</sup>	3.33	0.30	0.20	0.38	
<sup>7</sup> ∕ <sub>8</sub> ″ HP <sup>⊳s</sup>	3.33	0.30	0.40	0.49	
<sup>7</sup> ∕₀″ HP2+	3.70	0.27	0.26	0.47	
<sup>7</sup> /ଃ″ HP2+ <sup>sc</sup>	3.70	0.27	0.19	0.37	

AWNING					
		NFRC CERTIFIED			
	R Value	U Factor	SHGC	VT	
	WITH WA	RM EDGE			
<sup>7</sup> ∕≋″ HP	3.13	0.32	0.27	0.48	
7∕8″ HPsc	3.13	0.32	0.20	0.38	
7∕8″ <b>HP</b> ⁵	3.13	0.32	0.40	0.49	
7∕₃″ HP2+	3.45	0.29	0.26	0.47	
<sup>7</sup> ∕ <sub>8</sub> ″ HP2+ <sup>sc</sup>	3.45	0.29	0.20	0.37	
	WITH WAR	RM EDGE+			
7∕₃″ HP	3.33	0.30	0.27	0.48	
7∕8″ <b>HP</b> sc	3.33	0.30	0.20	0.38	
<sup>7</sup> ∕ <sub>8</sub> ″ HP <sup>⊳s</sup>	3.23	0.31	0.40	0.49	
<sup>7</sup> / <sub>8</sub> ″ HP2+	3.70	0.27	0.26	0.47	
<sup>7</sup> / <sub>8</sub> ″ HP2+ <sup>sc</sup>	3.70	0.27	0.20	0.37	

BI-PARTING & FRENCH SLIDING PATIO DOOR				
		NF	RC CERTIFI	ED
	R Value	U Factor	SHGC	VT
	WITH WA	RM EDGE		
²∕,₅″ HP	2.70	0.37	0.22	0.4
7∕∗″ HP <sup>sc</sup>	2.70	0.37	0.17	0.31
7∕₀″ HP2+	2.94	0.34	0.21	0.39
<sup>7</sup> ∕,₀″ HP2+ <sup>sc</sup>	2.94	0.34	0.16	0.31
1" HP2 <sub>MAX</sub>	3.23	0.31	0.19	0.31
1″ НР2 <sub>мах</sub> sc	3.23	0.31	0.14	0.19
1″ HP3 <sub>MAX</sub>	3.33	0.3	0.17	0.3
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.33	0.3	0.12	0.19
	WITH WAR	RM EDGE+		
²∕,₀″ HP	2.94	0.34	0.22	0.4
7∕₀″ HP <sup>sc</sup>	2.94	0.34	0.17	0.31
7∕8″ HP2+	3.13	0.32	0.21	0.39
<sup>7</sup> ∕₀″ HP2+ <sup>sc</sup>	3.03	0.33	0.16	0.31
1" HP2 <sub>MAX</sub>	3.33	0.3	0.19	0.31
1″ НР2 <sub>мах</sub> <sup>sc</sup>	3.33	0.3	0.14	0.19
1" HP3 <sub>MAX</sub>	3.45	0.29	0.17	0.3
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.45	0.29	0.12	0.19

HINGED PATIO DOOR				
		NFRC CERTIFIED		
	R Value	U Factor	SHGC	VT
	WITH WA	RM EDGE		
7∕₅″ HP	2.70	0.37	0.22	0.4
7∕₀″ HP <sup>sc</sup>	2.70	0.37	0.17	0.31
7∕₃″ HP2+	2.94	0.34	0.21	0.39
7∕∗″ HP2+ <sup>sc</sup>	2.94	0.34	0.16	0.31
1" HP2 <sub>MAX</sub>	3.23	0.31	0.19	0.31
1″ HP2 <sub>MAX</sub> sc	3.23	0.31	0.14	0.19
1″ НРЗ <sub>мах</sub>	3.33	0.3	0.17	0.3
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.33	0.3	0.12	0.19
	WITH WAR	RM EDGE+		
7∕₃″ HP	2.94	0.34	0.22	0.4
7∕8″ HP <sup>sc</sup>	2.94	0.34	0.17	0.31
7∕₃″ HP2+	3.13	0.32	0.21	0.39
<sup>7</sup> / <sub>8</sub> ″ HP2+ <sup>sc</sup>	3.03	0.33	0.16	0.31
1″ НР2мах	3.33	0.3	0.19	0.31
1" HP2 <sub>MAX</sub> sc	3.33	0.3	0.14	0.19
1" HP3 <sub>MAX</sub>	3.45	0.29	0.17	0.3
1″ НРЗ <sub>мах</sub> sc	3.45	0.29	0.12	0.19

#### NOTE:

All units rated in accordance with NFRC 100/200 standards by a NAMI Accredited lab. Performance values reflect the performance of units tested with the following configuration: 3mm glass, no grilles and Warm Edge spacer system and Warm Edge+ spacer system.

Optional Low-E glass packages are combined with capillary tubes to address performance needs in *high altitude applications.* 

## NFRC THERMAL PERFORMANCE DATA

FRENCH INSWING PATIO DOOR				
		NFRC CERTIFIED		
	R Value	U Factor	SHGC	VT
	WITH WA	RM EDGE		
<sup>7</sup> /₃″ HP	2.86	0.35	0.17	0.32
7∕₀″ HP <sup>sc</sup>	2.94	0.34	0.13	0.25
<sup>7</sup> /₃″ HP2+	3.13	0.32	0.17	0.31
7∕₃″ HP2+ <sup>sc</sup>	3.13	0.32	0.13	0.24
1" HP2 <sub>MAX</sub>	3.33	0.3	0.15	0.24
1″ НР2 <sub>мах</sub> sc	3.33	0.3	0.11	0.15
1" HP3 <sub>MAX</sub>	3.45	0.29	0.14	0.24
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.45	0.29	0.1	0.15
	WITH WAR	RM EDGE+		
²∕,₅″ HP	3.03	0.33	0.17	0.32
7∕8″ HP <sup>sc</sup>	3.03	0.33	0.13	0.25
²∕,₅″ HP2+	3.23	0.31	0.17	0.31
7∕₃″ HP2+ <sup>sc</sup>	3.13	0.32	0.13	0.24
1" HP2 <sub>MAX</sub>	3.45	0.29	0.15	0.24
1″ НР2 <sub>мах</sub> sc	3.45	0.29	0.11	0.15
1″ НРЗ <sub>мах</sub>	3.57	0.28	0.14	0.24
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.57	0.28	0.1	0.15

#### FRENCH OUTSWING PATIO DOOR

		NFRC CERTIFIED		
	R Value	U Factor	SHGC	VT
	WITH WA	RM EDGE		
7∕₃″ HP	3.03	0.33	0.17	0.32
7∕₃″ HP <sup>sc</sup>	3.03	0.33	0.13	0.25
7∕₀″ HP2+	3.23	0.31	0.17	0.31
<sup>7</sup> ∕₁ <sub>8</sub> ″ HP2+ <sup>sc</sup>	3.23	0.31	0.13	0.24
1" HP2 <sub>MAX</sub>	3.57	0.28	0.15	0.24
1″ HP2 <sub>MAX</sub> sc	°3.57	0.28	0.11	0.15
1″ НРЗ <sub>мах</sub>	3.70	0.27	0.13	0.24
1″ НРЗ <sub>мах</sub> <sup>sc</sup>	3.70	0.27	0.1	0.15
	WITH WAR	RM EDGE+		
7∕₃″ HP	3.13	0.32	0.17	0.32
7∕8″ HP <sup>sc</sup>	3.13	0.32	0.13	0.25
<sup>7</sup> ∕,₀″ HP2+	3.33	0.3	0.17	0.31
<sup>7</sup> / <sub>8</sub> " HP2+ <sup>sc</sup>	3.33	0.3	0.13	0.24
1" HP2 <sub>MAX</sub>	3.70	0.27	0.15	0.24
1" HP2 <sub>MAX</sub> sc	3.70	0.27	0.11	0.15
1" HP3 <sub>MAX</sub>	3.85	0.26	0.13	0.24
1″ НРЗ <sub>мах</sub> sc	3.85	0.26	0.1	0.15



#### LOW-E GLASS PACKAGES

Our Low-E glass packages combine Low-E and WarmEdge spacer options, providing insulating glass options to meet your specific needs. Our Low-E glass packages provide better performance in regions with hot summers and cold winters. Our Low-E<sup>sc</sup> (solar cooling) glass packages are optimized for regions with significant indoor cooling and glare reduction requirements. Our Low-E glass packages can be combined with capillary tubes to address performance needs in high elevation applications.

**Low-E** — Dual-pane with one lite of Low-E

**Low-E**<sup>sc</sup> — Dual-pane with one lite of solar cooling Low-E **Low-E2+** — Dual-pane with one lite of Low-E and one lite of Interior Surface Low-E

**Low-E2+**<sup>sc</sup> — Dual-pane with one lite of solar cooling Low-E and one lite of Interior Surface Low-E

 ${\bf Low-E^{PS}}$  — Dual-Pane with one lite of Passive Solar Low-E  ${\bf Low-E2+^{PS}}$  — Dual-Pane with one lite of Passive

R VALUE: Restrictive ambient air flow U FACTOR: Rate of heat loss SHGC: Solar Heat Gain Coefficient VT: Visible Transmittance



#### **HP GLASS PACKAGES**

Our HP glass packages combine Low-E with argon gas fill and WarmEdge spacer options,

providing high-performance insulating glass options to meet your specific needs. Argon is a safe, odorless, colorless gas, which is heavier or denser than air. When used in conjunction with Low-E glass, argon provides better insulation. That's because heat and cold do not pass through argon gas as easily as through air. Argon is nontoxic and presents no human health or environmental concerns. HP glass packages are also available in solar cooling (SC) glass packages for regions with significant indoor cooling and glare reduction requirements.

HP — One lite of Low-E and argon gas fill

**HP<sup>sc</sup>** — One lite of solar cooling optimized Low-E and argon gas fill

**HP2+** — One lite of Low-E and one lite of Interior Surface Low-E with argon gas fill

 $\rm HP2+^{sc}$  — One lite of solar cooling optimized Low-E and one lite of Interior Surface Low-E with argon gas fill

 $\mathbf{HP^{ps}}$  – One lite of passive solar Low-E glass (Surface 3) with argon gas fill

**HP2+**<sup>PS</sup> – One lite of passive solar Low-E and one lite of Interior Surface Low-E with argon gas fill

 $\label{eq:HP2_MAX} \begin{array}{l} \textbf{HP2}_{MAX} - \text{Triple-pane glass package with two lites of Low-E and an interior glass substrate with two chambers of argon gas fill \\ \textbf{HP3}_{MAX} - \text{Triple-pane glass package with two lites of Low-E and one lite of Interior Surface Low-E with two chambers of argon gas fill \\ \end{array}$ 

## WHAT IS LOW-E?

Low-E glass has a secondary, very thin metallic dual layer coating. This allows the sun's heat and light to pass through the insulating glass, but, at the same time, actually works to reflect radiant heat back toward its source. Since Low-E coating reflects radiant heat waves, it helps keep your home warmer in the winter by trapping radiant heat and cooler in the summer by blocking it from your home. Low-E<sup>sc</sup> is optimized for warmer climates by applying two heavier layers, through a patented process, resulting in blocking 73% of the sun's radiant heat from entering your home while providing superior insulation in cooler weather to save you energy year-round.

Our Interior Surface Low-E is engineered to have the characteristic window manufacturers and homeowners need most — lower U-Factor — and is applied to the surface of the glass you can touch inside your home, providing increased comfort and improved energy savings. One major benefit is a decrease in U-Factor of approximately 0.04, improving the energy efficiency so that many of our doors and windows meet new energy codes and ENERGY STAR® zone requirements. The neutral color with low haze and ultra-smooth surface of our Interior Surface Low-E provides a clearer view of the outdoors and can be cleaned with common household glass cleaners. No special instructions. Our Interior Surface Low-E is durable and scratch-resistant.

#### NATURAL LIGHT WITHOUT THE GLARE.

Ply Gem's Low-E glass has many advantages such as minimal visible darkening. Our glass minimizes interior glare, reducing eyestrain and making it easier to watch television or look at a computer screen when bright sunlight fills a room.



## ENERGY STAR®



Ply Gem MIRA Aluminum-Clad Wood windows and patio doors can be configured to meet a specific ENERGY STAR zone in all states. Your investment in ENERGY STAR products will pay for itself over time in reduced energy bills, not to mention increase the comfort level inside your home.





PLY GEM MIRA ALUMINUM-CLAD WOOD SERIES WINDOWS HAVE BEEN GREEN CERTIFIED BY THE NGBS HOME INNOVATION RESEARCH LABS.

This means you can be assured that Ply Gem MIRA Aluminum-Clad Wood Series windows and doors comply with specific green practice criteria in the National Green Building Standard. Visit GreenApprovedProducts.com for more details.



## **GLASS OPTIONS**

• HP

• HP<sup>sc</sup>

- Low-E
- Low-E<sup>sc</sup>
- Low-E2+
- Low-E2+<sup>sc</sup>
- НР<sup>PS</sup> • НР2+<sup>PS</sup> • НР2мах

• HP2<sub>MAX</sub>SC

- HP2+ • HP2+<sup>sc</sup>
- \* Tempered glass is standard on sliding patio doors.

NOTE: Low-E glass packages available to address high altitude applications. Not all glass options are available on all products. See page 25 for explanation of glass packages. Contact your Ply Gem Windows & Doors sales representative for a full list of MIRA Aluminum-Clad Wood glass thickness options and performance values.

- **НРЗ**мах
- HP3<sub>MAX</sub>SC
- Tinted
- Obscure
- Black Spandrel
- Tempered\*
- Laminated (security)
- Sound Package

### **SCREENS**

Color-matched full-length aluminum frames with Optimal Viewing screens improve your view without sacrificing strength and durability. Sliding patio door screens are equipped with stainless steel rollers for smooth operation. FlexScreens, which come standard for casements and awnings, hide in the window screen pocket which improve sight lines and eliminate the need for color matching the metal frame.



IMPACT RATED

- Rated in accordance with International Residential Codes and meets impact requirements in U.S. Zone 2 (110-120 mph) and Zone 3 (120-140 mph)
- Passes ASTM E1886/1996 Large Missile Impact and Cycling Tests
- Meets AAMA/WDMA/CSA 101/I.S.2/A440 standards. Florida Building Commission approved
- Meets wind-borne debris specifications for large missile D (8' missile for Impact Zone 3 at 50 ft/sec) and small missile C (4' missile for Impact Zone 2 at 40 ft/sec)
- Double hung units are constructed to meet H-LC50 rating
- Casement units feature corrosion-resistant coastal hardware and are constructed to meet C-LC60 rating
- French outswing patio doors feature corrosion-resistant coastal hardware in bright brass, satin nickel, or oil-rubbed bronze finishes and are constructed to meet LC50 rating

## **STANDARD GRILLE PATTERNS**





Half Colonial (shown on Casement)







Prairie



**Perimeter Prairie** 



## **GRILLE STYLES**







GBG











7⁄8" SDL

∛8" Full Surround **Removable Grilles** 

GBG = Grilles-Between-the-Glass

SDL = Simulated-Divided-Light

Putty Glazed SDL Bar

## **EXTERIOR COLOR OPTIONS**



## **Standard**Collection

Our standard colors are as durable as they are beautiful. *Choose from eight eye-catching hues.* 





# **Signature**Collection

From subtle shades to vibrant hues, Signature colors offer a full spectrum of fresh choices. *Choose from 27 colors.* 







## **Radiance**Collection

Our pearlized color process produces rich color with a metallic sheen. Colors become more vivid in bright light. *Choose from 11 colors.* 

# **Custom**Options

There's no limit to your color palette with Ply Gem. If you've got a particular color in mind that we don't offer, bring in a sample and we'll match it.

Colors shown may not be accurate representations. For color matching, please request color swatches from your Ply Gem sales representative.

## **EXTERIOR CASING OPTIONS**

\*Available on non-curved shaped windows and doors only.



## WINDOW HARDWARE OPTIONS



## **DOOR HARDWARE OPTIONS\***







Ply Gem, the Ply Gem logo, the "Building Products. Building Success." slogan, Ply Gem Windows & Doors and the Ply Gem Windows & Doors logo are trademarks of Ply Gem Industries, Inc. ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. ©2019 Ply Gem Industries, Inc.

For more information, call 888-9PLYGEM.

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## PRO SERIES

REPLACEMENT WINDOWS



#### A WHOLE NEW POINT OF VIEW.

It's more than a window. It's a whole new point of view. At Ply Gem Windows, we have a different view for the way the window business should be run. We believe you should have access to all of the top quality styles and brands across the country. That's why we've taken our entire portfolio of brands, brands that you know and trust, and given them one name – Ply Gem Windows. With one name comes big advantages, starting with a national manufacturing and distribution network. Combine that with our commitment to customer service, sustainable practices and a wide variety of window styles that fit every design need, and you'll get the perfect window for every project and every budget.

> As part of the Ply Gem family, you'll always have access to leading brands. From windows, doors, siding and accessories, stone veneer, fence and rail, rainware, shutters and designer accents, we have something for every project. We work with residential builders, remodelers, architects, distributors and dealers to help build sales. When you combine more than 50 years of experience, industry-leading customer service, and trusted local relationships you've got a company you can count on. **Ply Gem. Building products. Building success.**



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## PRO SERIES

REPLACEMENT WINDOWS

## TABLE OF CONTENTS

Explanation of Glass Packages		
Pro Series Replacement Overview	7	
Warranty and Design Pressure Information	. 8	
ENERGY STAR <sup>®</sup> and Energy Efficiency Information	9	
Double Hung Window	10	
Sliding Window	12	1
Casement and Awning Window	14	
Bay Window	16	
Bow Window	18	
Sliding Patio Door	20	)
Glass and Screen Options and Low-E Information	2	22
Grille Options and Icon Glossary		. 23


**Built to last. Made to impress.** You have a vision for how you want your replacement windows to look. Ply Gem Windows Pro Series can help you realize that vision. Every window is designed to fit your needs. You'll find the right sizes, the right designs and the right solutions to help make your window replacement project a success.



# **EXPLANATION OF GLASS PACKAGES**

## PERFORMANCE COMPARISON



The lower the U-Factor, the greater the insulation value. R-Value is the inverse (R=1/U) of the U-Factor. Total Unit Factors determined per NFRC-100 (National Fenestration Rating Council). Chart shows relationship between performance and Ply Gem Windows glass package options, not including energy package upgrade.

\*Ply Gem Windows R-5 products meet or exceed a U-Factor of 0.20 on fixed units & 0.22 on operating units.



## LOW-E GLASS PACKAGES FOR HIGH ALTITUDES

Our Low-E glass packages combine Low-E and Warm Edge spacer options, providing insulating glass options to meet your specific

needs. Our Low-E glass packages provide better performance in regions with hot summers and cold winters. Our Low-E<sup>sc</sup> (solar cooling) glass packages are optimized for regions with significant indoor cooling and glare reduction requirements. Our Low-E glass packages can be combined with capillary tubes to address performance needs in high altitude applications.

**Low-E<sup>\ddagger</sup>** – One lite of Low-E

 $Low-E^{sc\ddagger}$  — One lite of solar cooling Low-E

Low-E2<sup>‡</sup> – One lite of Low-E and one lite of Interior Surface Low-E

**Low-E2**<sup>sc‡</sup> – One lite of solar cooling Low-E and one lite of Interior Surface Low-E **Low-E2**<sub>MAX</sub><sup>‡</sup> – Triple-pane with two lites of Low-E with an interior glass substrate

 $\label{eq:Low-E3max} \textbf{Low-E3}_{\text{MAX}}^{\ddagger} - \text{Triple-pane with two lites of Low-E and one lite of Interior Surface Low-E}$ 

*‡* These glass packages are combined with capillary tubes to address performance needs in high altitude applications.



#### HP GLASS PACKAGES

Our HP glass packages combine Low-E with argon gas fill and Warm Edge spacer options, providing high-performance insulating glass

options to meet your specific needs. Argon is a safe, odorless, colorless gas, which is heavier, or denser, than air. When used in conjunction with Low-E glass, argon provides better insulation. That's because heat and cold do not pass through argon gas as easily as through air. Argon is nontoxic and presents no human health or environmental concerns. Our HP glass package is also available with a solar cooling (<sup>SC</sup>) option for regions with significant indoor cooling and glare reduction requirements.

**HP** – One lite of Low-E and argon gas fill

HP<sup>sc</sup> – One lite of solar cooling optimized Low-E and argon gas fill

HP2 – Two lites of Low-E with argon gas fill

HP2+ - One lite of Low-E and one lite of Interior Surface Low-E with argon gas fill



#### HPMAX GLASS PACKAGES (triple-pane)

Our HPMAX glass packages are triple-pane units that combine Low-E with two chambers of argon gas fill and Warm Edge spacer options, providing enhanced high-performance insulating glass options to meet your specific needs.

**HP2**<sub>MAX</sub> — Triple-pane with two lites of Low-E with an interior glass substrate and two chambers of argon gas fill **HP3**<sub>MAX</sub> — Triple-pane with two lites of Low-E and one lite of Interior Surface Low-E and two chambers of argon gas fill



## WHAT ARE R-5 WINDOWS?

High-performance R-5<sup>1</sup> windows are highly insulating windows with a whole-window R-Value of 5 (a U-Factor of around 0.2). Most of our Pro series products can be configured as R-5 units. These products are the top tier of energy-efficient windows for cold and mixed climates.

ENERGY STAR<sup>®</sup> windows have a U-Factor of around 0.3. Reducing the U-Factor from 0.3 to 0.2, with high-performance R-5 windows, reduces average heat loss through the window by more than 30%,<sup>2</sup> and saves consumers money on energy bills.

<sup>1</sup> R-5 = U-Factor of .22 or lower for operating units; .20 for fixed units <sup>2</sup> U.S. Department of Energy – Energy Efficiency and Renewable Energy EERE News, May 27, 2010

# PRO SERIES REPLACEMENT





## **OVERALL FEATURES**

- Glass systems with Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HP<sub>MAX</sub> glass package options offer increased energy efficiency
- 2 Vinyl won't conduct heat or cold, dramatically reducing frost and condensation
- 3 Pinch fusion-welded sash and mainframes for high strength and high energy efficiency
- 4 Double hung windows feature integral interlock for a weathertight seal and extra security
- 5 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold
- 6 Limited lifetime warranty means your windows are protected under the warranty for as long as you own your home
- 7 Sloped sill with unique SilLock design ensures natural water run-off
- 8 Warm Edge glass spacer systems reduce thermal transfer around the glass perimeter by using a unique U-shaped channel to separate glass panes and interrupt the natural flow of heat to cold



SIL LOCK



# DESIGN PRESSURE (DP) RATINGS



Ply Gem Pro Series products are tested to meet the air, water and structure requirements of AAMA/WDMA 101/I.S.2. Our products meet a Design Pressure (DP) rating of 35 (double hung) to as high as 70 (operating casement gateway size of 24" x 60").

With advanced level engineering and top-notch innovation, you are assured of the most durable, high-performing windows available nationwide.

Ask your Ply Gem Windows dealer or distributor for specific DP ratings for each Pro replacement style.

## LIMITED LIFETIME WARRANTY

## One of Life's Few Guarantees.

Life comes with few guarantees. Fortunately, Pro Windows offer you a permanent solution. Our custom vinyl windows offer more than construction quality, unmatched energy efficiency and low maintenance. They also offer a Limited Lifetime Warranty.

We believe so strongly in the durability of our windows that we back each window unit with our hassle-free Limited Lifetime Warranty. Lifetime means your windows are protected under the warranty for as long as you live in your home. And your warranty is transferable to the next homeowner, helping you protect your investment by increasing your home's resale value.

Wouldn't it be nice if you could feel so confident about everything you bought?

ZARRA

## **ENERGY EFFICIENCY**





## **ENERGY STAR® INFORMATION**



Ply Gem Replacement Pro Series windows and patio doors can be configured to meet a specific ENERGY STAR zone in all states. Your investment in ENERGY STAR products will pay for itself over time in reduced energy bills, as well as increase the comfort level inside your home.





PLY GEM PRO SERIES WINDOWS HAVE BEEN GREEN CERTIFIED BY THE NGBS HOME INNOVATION RESEARCH LABS.

This means you can be assured that Ply Gem Pro Series windows comply with specific green practice criteria in the National Green Building Standard. Visit www.GreenApprovedProducts.com for more details.



**DOUBLE HUNG WINDOWS** offer beauty, maintenance freedom and peace of mind at a price you can live with. Configurations include operating, fixed and factory mulled units.

# **DOUBLE HUNG WINDOW**







Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.

## **FEATURES**

- 1 Equal sightline sash to match traditional wood window appearance
- Ventilation limit-locks for added security when windows are partially open. Optional child safety vent latch available
- strong and in place for a lifetime of dependable performance
- 4 Fin and pile weatherstripping on both sash
- New sleek, low-profile design two cam-
- Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HPMAX glass package options offer increased energy efficiency
- 8 Lift rail for ease of operation
- Ergonomically designed tilt latch buttons for easy tilting in of both sash makes it easy and
- 10 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold
- 11 Extruded aluminum half-screen with fiberglass mesh
- windows dry and weather-tight seal at sill
- 13 Integral interlock and dual fin and pile weatherstripping on both sash and ainframe for protection against air, dust and moisture















# SLIDING WINDOW

**SLIDING WINDOWS.** Panoramic vistas meet ultimate convenience with our sliding windows. Their undeniable beauty is matched only by their superior thermal performance, letting you enjoy your view ever so comfortably. Available sliding window configurations include two- and three-lite configurations. Three-lite configurations available in 1/4-1/2-1/4 lite and 1/3-1/3-1/3 equal lite.

# **SLIDING WINDOW**





#### **Color Options**



## FEATURES

- State-of-the-art track and adjustable roller system for easy gliding
- Fully fusion-welded sash and mainframe for extra strength
- 3 Ventilation limit-locks for added security when windows are partially open. Optional child safety vent latch available
- 4 New sleek, low-profile design, cam-action locks on windows over 25" tall
- 5 In-home removable sash for safe, easy cleaning
- 6 Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HP*MAX* glass package options offer increased energy efficiency
- 7 Integral interlock and dual fin and pile weatherstripping on both sash and mainframe for protection against air. dust and moisture
- 8 Extruded aluminum half-screen with fiberglass mesh
- 9 Trim line design for maximum viewing area
- 10 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold













## CASEMENT & AWNING WINDOW

**CASEMENT & AWNING WINDOWS.** Dressing up your home with European flair has never been so easy or rewarding. With a full 90° sweep, these windows give nature a warm welcome in nice weather. But they work even better at giving bad weather the cold shoulder. Configurations include single, twin, triple and quad with integral or factory mulled options.

STREET.

THE OTHER DECK

# CASEMENT & AWNING WINDOW







## FEATURES

- Fusion-welded frames and sash stay strong and in place for a lifetime of dependable performance
- 2 Casements open a full 90° for easier, safer cleaning
- 3 Aluminum extruded screen with low profile retention clips
- 4 Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HP<sub>MAX</sub> glass package options offer increased energy efficiency
- 5 Easy-to-reach multi-point locking system provides increased security with a single conveniently located handle
- 6 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold
- 7 Folding/nested operating handles are standard on all Pro Series casement & awning windows
- 8 Upgrade casement windows with the optional stainless steel hardware for protection against corrosion in coastal areas; this option includes the operator mechanism arms, sash brackets, hinges, snubbers, tiebars and keepers











## **Color Options**



Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.



Upgrade casement windows with the Pro Series stainless steel hardware option to provide protection against corrosion in coastal areas.



Eusion-welded strength



Folding/nested operator handle



Matching lock features a sleek low-profile design that, in either the locked or unlocked position, won't interfere with curtains or blinds





# **BAY WINDOW**

**BAY WINDOWS.** All the world's a stage, and this is your personal theater. The best part is that while the drama happens outdoors, award-winning performances for beauty and energy efficiency go on and on inside. Bays available in 3 or 4-window, 35° and 45° configurations.

# **BAY WINDOW**







## Pre-finished or Laminated Interior Head, Seat and Jamb Options



## **Solid Surface Seat Options**



Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.

## **Support and Insulation Systems**

#### (2) Cable Kits Standard

#### **External Knee Braces**

- 1 Provides exterior support for bay, bow and garden windows<sup>1</sup>
- 2 Available in white, beige, earthtone and sandstone
- 3 Pre-finished to be maintenance free
- 1. Knee braces and cable system kits are required for bay/ bow windows and are included with the window.

## FEATURES

- 1 Custom made to ensure a good fit in your home
- 2 Fusion-welded frames and sash for extra strength and dependable performance
- 3 Available in casement or double hung styles
- 4 Choose from four available grille options
- 5 Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HP*MAX* glass package options offer increased energy efficiency
- 6 Heavy-duty weatherstripping ensures a tighter seal
- 7 Multi-point locking system secures the window in several locations simultaneously with a single handle
- 8 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold









#### **Superior Insulated Seats**

- 1 Insulated with high density polystyrene insulating board combined with a  $3^{\text{w}}$  exterior grade plywood surface – 3" overall thickness
- 2 R-Value of 7.6 six times that of a typical noninsulated bay/bow windows
- 3 Available in white or beige (earthtone units are clad with brown coil)





# **BOW WINDOW**

**BOW WINDOWS.** Adding a touch of sophistication to your home is easy with these custom-made Bow Windows. Offering an array of designer accessories, these windows are available in 3, 4 or 5-window configurations.



## Pre-finished or Laminated Interior Head, Seat and Jamb Options



## **Solid Surface Seat Options**



Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.

## **Support and Insulation Systems**

#### (2) Cable Kits Standard

#### **External Knee Braces**

- 1 Provides exterior support for bay, bow and garden windows<sup>1</sup>
- 2 Available in white, beige, earthtone and sandstone
- 3 Pre-finished to be maintenance free

1. Knee braces and cable system kits are required for bay/ bow windows and are included with the window.

## FEATURES

- 1 Custom made to ensure a good fit in your home
- 2 Fusion-welded frames and sash for extra strength and dependable performance
- 3 Available in casement or double hung styles
- 4 Choose from four available grille options
- 5 Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HP<sub>MAX</sub> glass package options offer increased energy efficiency
- 6 Heavy-duty weatherstripping ensures a tighter seal
- 7 Multi-point locking system secures the window in several locations simultaneously with a single handle
- 8 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold









#### **Superior Insulated Seats**

- Insulated with high-density polystyrene insulating board combined with a ¾" exterior grade plywood surface – 3" overall thickness
- 2 R-Value of 7.6 six times that of typical noninsulated bay/bow windows
- 3 Available in white or beige (earthtone units are clad with brown coil)





## SLIDING PATIO DOOR

**SLIDING PATIO DOORS** are your home's way of welcoming guests with arms wide open. But when heat, cold, rain, wind or intruders come knocking, this beauty is tough as nails. Configurations include twopanel units with optional complementary side lites and transoms.

# **SLIDING PATIO DOOR**







## **FEATURES**

- fully welded for superior strength and durability
- Full perimeter, high performance weatherstripping
- 3 Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HPMAX glass package options offer increased energy efficiency
- 4 Doors glide on tandem steel rollers, which provide smooth and effortless and closed
- 5 Add the convenience of an easy-toactivate security lock that allows you peace of mind
- 6 Standard sizes: 5' x 68", 6' x 68" and 8' x 68"
- New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold









Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples. Pro Replacement Series Sliding Patio Doors are available in white (interior/exterior) and beige (interior/exterior) only.



Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.

## **GLASS OPTIONS**

- Low-E • Low-E<sup>sc</sup>
- Low-E2
- Low-E2<sup>sc</sup>
- Low-E2*MAX*\*
- Low-E3*max*\*
- HP
- HP<sup>sc</sup>
- HP2
- HP2+

- HP2*мах* \*
- HP3*max*\*
- Tinted
- Double Strength glass
- Obscure

- Glue Chip Obscure
- Tempered
- Laminated
- Sound Package

\* See page 6 for explanation of glass packages. Low-E2MAX, Low-E3MAX, HP2MAX and HP3MAX are not available on all products. See product pages for details. Contact your Ply Gem sales representative for a full list of Pro Series glass thickness options and ratings.



**Optional Advanced Easy Clean® Glass** is a remarkable advancement in glass design that eliminates frequent exterior window cleaning. Windows and doors with special Easy Clean Glass require less effort than windows with ordinary glass.

## WHAT IS LOW-E?

Low-E glass has a secondary, very thin metallic dual layer coating. This allows the sun's heat and light to pass through the insulating glass, but, at the same time, works to reflect interior radiant heat back toward its source. Since Low-E coating reflects radiant heat waves, it helps keep your home warmer in the winter by trapping radiant heat and cooler in the summer by blocking it from your home.

#### NATURAL LIGHT WITHOUT THE GLARE.

Ply Gem's Low-E glass has many advantages, such as minimal visible darkening. Our glass

minimizes interior glare, reducing eyestrain and making it easier to watch television or look at a computer screen when bright sunlight fills a room.



# SCREEN OPTIONS

Fiberglass mesh is the standard insect screening material used on all Ply Gem Windows replacement products with available half- or full-screens. This product provides good outward visibility and ventilation and will not rust, corrode or stain. Available options include:

#### ALUMINUM MESH

Provides added protection against aggressive regional insects that eat through normal fiberglass mesh. Charcoal finish reduces glare.

#### **SOLAR BLOCK MESH**

Blocks 70% of the sun's heat and glare. Keeps living spaces cooler, reduces energy costs and protects furnishings against fading.

#### **OPTIMUM VIEWING MESH**

Thinner fiberglass material allows maximum viewing while tighter mesh pattern keeps out tiny insects.

# CUSTOM GRILLES



# ICON GLOSSARY

Below is a glossary of our icons that you will see throughout the Ply Gem Windows Replacement brochures. These icons identify features and benefits for each window so you can easily understand what is available to you with each style.



#### WARM EDGE TECHNOLOGY

The Warm Edge glass spacer system within Ply Gem Pro Series Replacement windows reduces thermal transfer around the glass perimeter by utilizing a unique U-shaped channel to separate glass panes and interrupt the natural flow of heat to cold. Warm Edge is one continuous piece creating a stronger, more energyefficient insulated glass unit. Plus, it flexes with glass expansion and contraction to ensure a strong seal for the life of the window.



#### SIL LOCK

Pro Series Replacement double hung windows with SilLock are built with a sloped sill, which forces water to drain to the exterior of the window, keeping your windows dry. This unique design also ensures a tight weatherstrip contact at the sill.

Ply Gem windows and patio doors can be ordered



#### WARM EDGE+ TECHNOLOGY

The Warm Edge+ Spacer System has all of the features of the Warm Edge Spacer, but utilizes a new, less conductive material, which provides a lower U-Factor.



#### **R-CORE® INSULATION**

Available as an option on the Ply Gem Windows Pro Series, the vinyl mainframes can be filled with patented\* R-Core® offering more than twice the insulating performance as the typical wood frame and nearly 4x more than hollow vinyl or aluminum frames.

\* U.S. Patent Number: 4,516,356



#### NEW GENERATION VINYL

Wood or metal windows can stick when they swell or deteriorate from corrosion. New Generation Vinyl withstands harsh weather and wear-and-tear better. Ply Gem Pro Series Replacement windows are constructed with rugged, maintenance-free New Generation uiPVC. Its low conductivity and high energy efficiency properties are ideal for Ply Gem's advanced window construction. And because vinyl's base color is solid through-and-through, you'll never need to paint or stain these windows.





ROWP

## **COASTAL HARDWARE**

CUSTOM SIZING

Typical hardware can easily become corroded or damaged when exposed to constant salt in the air. Ply Gem windows with coastal hardware will consistently stand up to saltwater and other harsh coastal conditions.

#### **DP CERTIFIED**

Ply Gem Pro Series Replacement windows are tested to meet the air, water and structure requirements of AAMA/WDMA 101/I.S.2. Our products meet a Design Pressure (DP) rating of 35 (double hung) to as high as DP70 operating casement (gateway size of 24" x 60"). With advanced level engineering and top-notch innovation, you are assured of the most durable, highperforming windows available nationwide.



#### PINCH FUSION WELDING

Ply Gem Pro Series Replacement windows are entirely fusionwelded - sashes and mainframes - to create a solid, one-piece unit that maintains its strength over the years. Our state-of-theart fusion process ensures frame and sash corners won't have the excess variance found with other welding techniques.







Ply Gem, the Ply Gem logo, the "Building Products. Building Success." slogan, Ply Gem Windows and the Ply Gem Windows logo are trademarks of Ply Gem Industries, Inc. R-Core and Advanced Easy Clean are registered trademarks of Ply Gem Windows. ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. ©2018 Ply Gem Industries, Inc.

For more information, call 888-9PLYGEM.

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# PREMIUM SERIES

REPLACEMENT WINDOWS



#### A WHOLE NEW POINT OF VIEW.

It's more than a window. It's a whole new point of view. At Ply Gem Windows, we have a different view for the way the window business should be run. We believe you should have access to all of the top quality styles and brands across the country. That's why we've taken our entire portfolio of brands, brands that you know and trust, and given them one name – Ply Gem Windows. With one name comes big advantages, starting with a national manufacturing and distribution network. Combine that with our commitment to customer service, sustainable practices and a wide variety of window styles that fit every design need, and you'll get the perfect window for every project and every budget.

As part of the Ply Gem family, you'll always have access to leading brands. From windows, doors, siding and accessories, stone veneer, fence and rail, rainware, shutters and designer accents, we have something for every project. We work with residential builders, remodelers, architects, distributors and dealers to help build sales. When you combine 75 years of experience, industry-leading customer service, and trusted local relationships you've got a company you can count on. **Ply Gem. Building products. Building success.** 



# PREMIUM SERIES

REPLACEMENT WINDOWS

## TABLE OF CONTENTS

6
.7
8 🛛 🕅
9
10
12
14
16
18
20
23
24
25



**Stunning statements. Smart solutions.** Stand out with a stylish new look. Upgrade to a more energyefficient option. Recreate the authentic look of an old window. Whatever your reason, when you're ready for replacement windows choose the ultimate in performance and luxury – choose Ply Gem Windows Premium Series Replacement. These custom, top-ofthe-line windows provide great looks that last. With styles and options to meet the demands of even the most discriminating homeowner and performance to match, this is truly a replacement window for a lifetime of luxury.



# **EXPLANATION OF GLASS PACKAGES**

## PERFORMANCE COMPARISON



The lower the U-Factor, the greater the insulation value. R-Value is the inverse (R=1/U) of the U-Factor. Total Unit Factors determined per NFRC-100 (National Fenestration Rating Council). Chart shows relationship between performance and Ply Gem Windows glass package options, not including energy package upgrade.

\*Ply Gem Windows R-5 products meet or exceed a U-Factor of 0.20 on fixed units & 0.22 on operating units.



#### LOW-E GLASS PACKAGES

Our Low-E glass packages combine Low-E and Warm Edge spacer options, providing insulating glass options to meet your specific

needs. Our Low-E glass packages provide better performance in regions with hot summers and cold winters. Our Low-E<sup>sc</sup> (solar cooling) glass packages are optimized for regions with significant indoor cooling and glare reduction requirements. Our Low-E glass packages can be combined with capillary tubes to address performance needs in high elevation applications.

#### Low-E — One lite of Low-E

Low-E<sup>sc</sup> – One lite of solar cooling Low-E

Low-E2<sup>‡</sup> – One lite of Low-E and one lite of Interior Surface Low-E

**Low-E2**<sup>sc‡</sup> – One lite of solar cooling Low-E and one lite of Interior Surface Low-E **Low-E2**<sub>MAX</sub><sup>‡</sup> – Triple-pane with two lites of Low-E with an interior glass substrate

**Low-E3**<sub>MAX</sub><sup> $\ddagger$ </sup> — Triple-pane with two lites of Low-E and one lite of Interior Surface Low-E

<sup>‡</sup> These glass packages are combined with capillary tubes to address performance needs in high elevation applications.



#### HP GLASS PACKAGES

Our HP glass packages combine Low-E with argon gas fill and Warm Edge spacer options, providing high-performance insulating glass

options to meet your specific needs. Argon is a safe, odorless, colorless gas, which is heavier or denser than air. When used in conjunction with Low-E glass, argon provides better insulation. That's because heat and cold do not pass through argon gas as easily as through air. Argon is nontoxic and presents no human health or environmental concerns. Our HP glass package is also available in a solar cooling (<sup>sc</sup>) glass package for regions with significant indoor cooling and glare reduction requirements.

HP - One lite of Low-E and argon gas fill

HP<sup>sc</sup> – One lite of solar cooling optimized Low-E and argon gas fill

HP2 – Two lites of Low-E with argon gas fill

HP2+ - One lite of Low-E and one lite of Interior Surface Low-E with argon gas fill



#### HPMAX GLASS PACKAGES (triple-pane)

Our HPMAX glass packages are triple-pane units that combine Low-E with two chambers of argon gas fill and Warm Edge spacer options, providing enhanced high-performance insulating glass options to meet your specific needs.

**HP2**<sub>MAX</sub> — Triple-pane with two lites of Low-E with an interior glass substrate and two chambers of argon gas fill **HP3**<sub>MAX</sub> — Triple-pane with two lites of Low-E and one lite of Interior Surface Low-E and two chambers of argon gas fill



## WHAT ARE R-5 WINDOWS?

High-performance R-5<sup>1</sup> windows are highly insulating windows with a whole-window R-Value of 5 (a U-Factor of around 0.2). Most of our Premium series products can be configured as R-5 units. These products are the top tier of energy-efficient windows for cold and mixed climates.

ENERGY STAR<sup>®</sup> windows have a U-Factor of around 0.3. Reducing the U-Factor from 0.3 to 0.2, with high-performance R-5 windows, reduces average heat loss through the window by more than 30%,<sup>2</sup> and saves consumers money on energy bills.

<sup>1</sup> R-5 = U-Factor of .22 or lower for operating units; .20 for fixed units <sup>2</sup> U.S. Department of Energy – Energy Efficiency and Renewable Energy EERE News, May 27, 2010

# PREMIUM SERIES REPLACEMENT





## OVERALL FEATURES

- Pinch fusion-welding construction creates a solid, one-piece unit with no excess variance for long-term durability
- 2 Heavy-duty weatherstripping provides a barrier to air and water, saving energy dollars
- **3** Sloped sill with unique SilLock design ensures natural water runoff
- Premium Series comes standard with the vinyl mainframe filled with patented R-Core<sup>®</sup> insulation (pre-expanded high-density solid polyurethane), the same type used in many refrigerator/freezer doors; for enhanced performance Premium Series Energy Package options feature the mainframe and sash filled with patented R-Core
- 5 Interforce II<sup>™</sup> reinforced meeting rails on double hung and sliding windows with Premium Series Energy Package options feature internal structural fiberglass extrusions for reinforcement along with an integral interlocking system, providing unsurpassed

strength and durability without conduction

- 6 Glass systems with Warm Edge (standard) or Warm Edge+ (optional upgrade) spacer systems and HP or HPMAX glass package options (see page 6 for details) offer increased energy-efficiency
- 7 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold











# DESIGN PRESSURE (DP) RATINGS



Ply Gem Premium Series products are tested to meet the air, water and structure requirements of AAMA/WDMA 101/I.S.2. Our products meet a Design Pressure (DP) rating of 35 (double hung) to as high as DP70 (operating casement gateway size of 24" x 60").

With advanced level engineering and top-notch innovation, you are assured of the most durable, high-performing windows available nationwide.

Ask your Ply Gem Windows dealer or distributor for specific DP ratings for each Premium Series replacement style.

# ENERGY PACKAGE UPGRADE OPTIONS



The Energy Package Upgrade options include the HP Glass Package (see page 6 for glass package options) of your choice with the addition of R-Core to the sash and frame. R-Core is a patented process utilizing pre-formed polyurethane insulation. In addition, Interforce II<sup>™</sup> fiberglass reinforcement is placed in the meeting rails of double hung and slide windows providing DP50 and DP45 product ratings. The Energy Package options provide unsurpassed strength, durability and energy-efficiency.

# LIMITED LIFETIME WARRANTY

## One of Life's Few Guarantees.

Life comes with few guarantees. Fortunately, Premium Windows offer you a permanent solution. Our custom vinyl windows offer more than construction quality, unmatched energy-efficiency and low maintenance. They also offer a Limited Lifetime Warranty.

We believe so strongly in the durability of our windows that we back each window unit with our hassle-free Limited Lifetime Warranty. Lifetime means your windows are protected under the warranty for as long as you live in your home. And your warranty is transferable to the next homeowner, helping you protect your investment by increasing your home's resale value.

Wouldn't it be nice if you could feel so confident about everything you bought?



## **ENERGY EFFICIENCY**





## **ENERGY STAR® INFORMATION**



Ply Gem Replacement Premium Series windows and patio doors can be configured to meet a specific ENERGY STAR zone in all states. Your investment in ENERGY STAR products will pay for itself over time in reduced energy bills, as well as increase the comfort level inside your home.





PLY GEM PREMIUM SERIES WINDOWS HAVE BEEN GREEN APPROVED BY THE HOME INNOVATION RESEARCH CENTER.

This means you can be assured that Ply Gem Premium Series windows comply with specific green practice criteria in the National Green Building Standard. Visit www.GreenApprovedProducts.com for more details.



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# **DOUBLE HUNG WINDOW**

**DOUBLE HUNG WINDOWS** remain a favorite for their combination of classic looks and convenient operation. And though these may look like traditional windows, they're the picture of modern window innovation. Available double hung configurations include operating, fixed and factory mulled units.

# DOUBLE HUNG WINDOW



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## FEATURES

- 1 Fully fusion-welded New Generation uiPVC vinyl sash and mainframe for extra strength and enduring beauty with SilLock design – featuring a sloped sill to keep windows dry while ensuring a weather-tight seal at sill
- 2 Meeting rails have integral interlock for a weather-tight seal and extra security
- **3** Fin and pile weatherstripping on both sash and mainframe for protection against air, dust and moisture
- 4 <sup>7</sup>/<sub>8</sub>" IGU glass systems offer energy-efficient Warm Edge standard and optional Warm Edge+ for improved performance
- 5 Triple weatherstripped check rail and sash ensures long-term performance
- 6 Ventilation limit latches for added security when windows are partially open; optional child safety vent latch available
- 7 Interforce II<sup>™</sup> fiberglass reinforcement in the meeting rails for unsurpassed strength and durability with Premium Series Energy Package option
- 8 Two flush-mounted cam-action locks on windows over 25" wide
- **9** Top and bottom lift rail for ease of operation and both sash tilt-in for easy and safe cleaning of the exterior of window
- **10** Equal sight lines for traditional wood window aesthetics
- Premium Series comes standard with the vinyl mainframe filled with patented R-Core<sup>®</sup> insulation (pre-expanded high-density solid polyurethane), the same type used in many refrigerator/freezer doors; for enhanced performance Premium Series Energy Package options feature the mainframe and sash filled with patented R-Core
- **12** Constant force balance system
- **13** Comes standard with aluminum extruded half screen with fiberglass mesh



















## **SLIDING WINDOW**

**SLIDING WINDOWS.** Panoramic views meet ultimate convenience. Their undeniable beauty is matched only by their superior thermal performance, letting you enjoy your view ever so comfortably. Available sliding window configurations include twoand three-lite configurations. Three-lite configurations available in 1/4-1/2-1/4 lite and 1/3-1/3 equal lite.

# **SLIDING WINDOW**





## FEATURES

- Premium Series comes standard with the vinyl mainframe filled with patented R-Core<sup>®</sup> insulation (pre-expanded high-density solid polyurethane), the same type used in many refrigerator/freezer doors; for enhanced performance Premium Series Energy Package options feature the mainframe and sash filled with patented R-Core
- 2 Integral interlock with Interforce II<sup>™</sup> reinforces the meeting rails for unsurpassed strength, warmth and durability with Premium Series Energy Package upgrade
- **3** Full-perimeter, high-performance weatherstripping provides maximum energy-efficiency
- 4 7/8" IGU glass systems offer energy-efficient Warm Edge standard and optional Warm Edge+ for improved performance
- 5 Fully fusion-welded New Generation uiPVC vinyl sash and mainframe for extra strength and enduring beauty featuring a sloped sill to keep windows dry while ensuring a weather-tight seal at sill
- 6 Ventilation limit latch for added security when windows are partially open; optional child safety latch available













## CASEMENT & AWNING WINDOW

**CASEMENT & AWNING WINDOWS.** Dressing up your home with European flair has never been so rewarding. With a full 90° sweep, these windows give nature a warm welcome in nice weather. But they work even better at giving bad weather the cold shoulder. Configurations include single, triple and quad integral mulled or factory mulled units.

# CASEMENT & AWNING WINDOW

5

**FEATURES** 

mainframe filled with patented R-Core<sup>®</sup> insulation (pre-expanded high-density solid polyurethane),

the same type used in many refrigerator/freezer doors; for enhanced performance Premium Series Energy Package options feature the mainframe and sash filled with patented R-Core

2 Fusion-welded frames and sash stay strong and in

**3** Easy-to-reach multi-point locking system provides increased security with a single conveniently

New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold

6 Aluminum extruded screens with low profile

Upgrade casement windows with the optional

Premium Series stainless steel hardware for protection against corrosion in coastal areas; this option includes the operator mechanism arms,

8 <sup>7</sup>/<sub>8</sub>" IGU glass systems offer energy-efficient Warm Edge standard and optional Warm Edge+









Upgrade casement windows with the optional coastal hardware package.

and keepers















Fusion-welded strength



Folding/nested operator handle



Matching lock features a sleek operating design

1. Most awning and operating casement windows meet a Design Pressure (DP) rating of 70 (gateway size of 24" by 60") and most fixed casement windows meet a Design Pressure (DP) rating of 45. 2. Optional.



## BAY & BOW WINDOW

**BAY & BOW WINDOWS.** Custom made with every detail in mind, our bay & bow windows offer an array of designer accessories with endless design options. Bays available in 3- or 4-window, 35° and 45° configurations. Bows available in 3-, 4- or 5-window configurations.
# **BAY & BOW WINDOW**







### FEATURES

- 1 Custom made to ensure a good fit in your home
- 2 Fusion-welded New Generation uiPVC vinyl frames and sash for extra strength, dependable performance and enduring beauty
- 3 Available in casement or double hung styles to complement your architectural style or personal preference
- 4 Heavy-duty weatherstripping ensures a tighter seal
- 5 Bays & bows with double hung or casement style window configurations feature R-Core<sup>®</sup> insulation and Warm Edge or optional Warm Edge+ spacer system to help keep utility costs down
- 6 For bay or bow configurations with casement style windows, multi-point locking system secures the window in several locations simultaneously with a single handle
- 7 Pre-finished interiors are sealed for beauty and durability and available in golden oak, natural oak and colonial cherry
- 8 Laminated interiors available in three woodgrains and two solid colors: golden oak, natural oak, colonial cherry, white and beige











### Pre-finished or Laminated Interior Options

10



### **Support and Insulation Systems**

#### (2) Cable Kits Standard

#### **External Knee Braces**

- 1 Provides exterior support for bay, bow and garden windows<sup>1</sup>
- 2 Available in white, beige, earthtone and sandstone
- **3** Pre-finished to be maintenance free

#### **Superior Insulated Seats**

- 1 Insulated with high-density polystyrene insulating board combined with a ¾" exterior grade plywood surface 3" overall thickness
- 2 R-Value of 7.6 six times that of typical non-insulated bay/bow windows
- **3** Available in white or beige (earthtone units are clad with brown coil)



 Required and included standard with garden window. Knee braces and cable system are required for bay/bow windows and are included with the window.

# GARDEN WINDOW

1

**GARDEN WINDOWS.** You don't have to have the greenest thumb in the family to watch nature blossom in your garden window. The bountiful sunlight they provide will keep your plants thriving year-round.

STA

### **GARDEN WINDOW**









Knee Braces

# Pre-finished Laminated Seats, Jambs and Heads are Available in White and Beige



### Solid Surface Seat Color Options

Beach





Sandstone

Dusk

Dark Brown Black

Add custom style to your garden window (available for bays/bows also) by adding a solid surface seat available in six colors

### FEATURES

- 1 New Generation uiPVC vinyl never needs painting or caulking and resists conducting heat and cold
- 2 Tempered glass interior shelf adds space for plants (standard on units under 50")
- **3** Operating trapezoid casement side panels feature easy-to-operate, easy-to-reach, multi-point locking system
- 4 Fusion-welded frames and sash for extra strength and dependable performance
- 5 Add custom style to your garden window (available for bays/bows also) by adding a solid surface seat available in six colors
- 6 Available in white, beige or earthtone color options on exterior and white on interior
- 7 Sloped top lite is only available with a dual pane insulated glass unit
- 7/8" IGU glass systems offer energy-efficient
  Warm Edge standard and optional Warm Edge+
  for improved performance









### **Support and Insulation Systems**

#### **External Knee Braces**

- 1 Provides exterior support for bay, bow and garden windows<sup>1</sup>
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1. Required and included standard with garden window. Knee braces and cable system are required for bay/bow windows and are included with the window.



### SLIDING PATIO DOORS are your home's way of welcoming guests with arms wide open. But when heat, cold, rain, wind or intruders come knocking, this beauty is as tough as nails. Configurations include two and three panel operating units as well as complementary side lites and transoms.

# **SLIDING PATIO DOOR**









Oversized tandem steel rollers for smooth, effortless operation. Access to adjustment screw for ease of panel alignment through exterior face of panel eliminates unsightly screw caps on the interior and ensures proper operation.

### FEATURES

- 1 1" IGU glass systems offer energy-efficient Warm Edge standard and optional Warm Edge+ for improved performance
- 2 Custom-fit interlock system provides extra protection against air infiltration for enhanced energy performance



- **3** Our doors glide on oversized tandem steel rollers and provide smooth and effortless operation
- 4 A heavy-duty vinyl sill with a stainless steel roller guide delivers superior strength, resists frost and condensation
- **5** Anti-take-out device in the head of every door makes it virtually impossible to remove the active panel even with the rollers in their lowest adjustment position, providing comfort and peace of mind
- 6 While Ply Gem Replacement Series patio doors come standard with a rugged locking system, for optimum security, choose our optional dual-point lock and/or our optional footbolt lock with vent latch position
- 7 Available on Ply Gem Replacement Series patio doors, optional pet-resistant screen is seven times stronger than standard insect screening and offers excellent outward visibility, is made from vinyl-coated polyester and is not harmful to pets
- 8 Constructed of New Generation uiPVC vinyl for enduring beauty with fusion-welded panels for added strength and durability





PINCH FUSI WELDIN

# **DOOR OPTIONS**

### **Optional Solar Blinds or Shades Between the Glass**





If you desire the ultimate in solar control then you will fall in love with our Solar Blind and Solar Shade options. Our Solar Blinds are available in Slide action (available in white) or Pull Cord action (available in Gray, White, Gold, Almond or Tan) for lift and tilt operation. Our Solar Shade interior color options are Taupe, Almond, Charcoal, and Gray.



Exterior keyed lock in optional brass (brass is standard on woodgrains and two-tone options)



optional brass (brass is standard on woodgrains and two-tone options)



Optional dual-point lock available with keyed metallic finish handle or with nonkeyed standard handle



Multi-position optional footbolt



BEIGE



WHITE



SATIN CHROME









22

# **ARCHITECTURAL SHAPES**



# **CUSTOMIZE YOUR VIEW**

From the road and from within your home, windows tell a story. Every choice adds distinction: from the woodgrain or solid colors that surround each window to the grilles or subtle elegance of Regal V-grooved cut glass. Ultimately, the story of your home is what you see through your eyes.

Premium Windows feature our two-color vinyl extrusion process allowing you design flexibility to match your exterior style with an easy to coordinate white interior.

Now share your Premium Windows with the world.

### **COLOR OPTIONS**



Colors are reproduced as accurately as printer technology allows. Please see your authorized Ply Gem Windows representative for actual samples.

# **SCREEN OPTIONS**

Fiberglass mesh is the standard insect screening material used on all Ply Gem Windows replacement products with available half or full screens. This product provides good outward visibility and ventilation and will not rust, corrode or stain. Additional options available include:

#### **ALUMINUM MESH**

Provides added protection against aggressive regional insects that eat through normal fiberglass mesh. Charcoal finish reduces glare.

#### **SOLAR BLOCK SCREEN**

Blocks 70% of the sun's heat and glare. Keeps living spaces cooler, reduces energy costs and protects furnishings against fading.

#### **OPTIMAL VIEWING SCREEN**

Thinner fiberglass material allows maximum viewing while tighter mesh pattern keeps out tiny insects.

#### **PET-RESISTANT SCREEN<sup>1</sup>**

Strong vinyl-coated polyester provides a screen seven times stronger than traditional insect screening with excellent outward visibility.

# **CUSTOM GRILLES**



# **CUSTOM DESIGNER WINDOW GLASS**

### Brighten your outlook with decorative options.

How do you make an endearing home absolutely exquisite? Add a spectacular accent, with custom designer glass. Designed and crafted by hand as fine decorative glass has always been, Premium Windows custom designer glass brings invaluable character and distinction to your home.



Star-beveled







La Parisienne



Charlevoix



Bratenahl



Sheffield

Shown above is a small selection of the Custom Designer Window Glass options available.

### **Caming Color Options**



# **GLASS OPTIONS**

- Low-E
- Low-E<sup>sc</sup>
- L<u>ow-E2</u>
- Low-E2<sup>sc</sup>
- Low-E2*MAX*\*
- Low-E3*MAX* \*
- HP
- HP<sup>sc</sup>
- HP2
- HP2+

- HP2*мах* \*
- HP3*max*\*
- Tinted
- Double Strength glass
- Obscure

- Glue Chip Obscure
- Tempered
- Laminated
- Sound Package

\* See page 6 for explanation of glass packages. Low-E2*Max*, Low-E3*Max*, HP2*Max* and HP3*Max* are not available on all products, see product pages for details. Contact your Ply Gem sales representative for a full list of Premium Series glass thickness options and ratings.

ADVANCED EASY CLEAN G L A S S

**Optional Advanced Easy Clean® Glass** is a remarkable advancement in glass design that eliminates frequent exterior window cleaning. Windows and doors with special Easy Clean Glass require less effort than windows with ordinary glass.

# WHAT IS LOW-E?

Low-E glass has a secondary, very thin metallic dual layer coating. This allows the sun's heat and light to pass through the insulating glass, but, at the same time, actually works to reflect radiant heat back toward its source. Since Low-E coating reflects radiant heat waves, it helps keep your home warmer in the winter by trapping radiant heat and cooler in the summer by blocking it from your home. Low-E<sup>sc</sup> is optimized for warmer climates by applying two heavier layers, through a patented process, resulting in blocking 73% of the sun's radiant heat from entering your home while providing superior insulation in cooler weather to save you energy year-round.

Our Interior Surface Low-E is engineered to have the characteristic window manufacturers and homeowners need most — lower U-Factor— and is applied to the surface of the glass you can touch inside your home, providing increased comfort and improved energy savings. One major benefit is a decrease in U-Factor



of approximately 0.04, improving the energy efficiency so that many of our doors and windows meet new energy codes and ENERGY STAR<sup>®</sup> zone requirements. The neutral color with low haze and ultra-smooth surface of our Interior Surface Low-E provides a clearer view of the outdoors and can be cleaned with common household glass cleaners. No special instructions. Our Interior Surface Low-E is durable and scratch-resistant.

#### NATURAL LIGHT WITHOUT THE GLARE.

Ply Gem's Low-E glass has many advantages such as minimal visible darkening. Our glass minimizes interior glare, reducing eyestrain and making it easier to watch television or look at a computer screen when bright sunlight fills a room.

# ICON GLOSSARY

Below is a glossary of our icons that you will see throughout the Ply Gem Windows Replacement brochures. These icons identify features and benefits for each window so you can easily understand what is available to you with each style.



#### **CUSTOM SIZING**

Ply Gem Premium Series Replacement windows and patio doors can be ordered in 1/8 inch increments to accommodate any replacement application, providing a perfect fit and minimizing installation time and special trimming requirements.



#### **DP CERTIFIED**

Ply Gem Premium Series Replacement windows are tested to meet the air, water and structure requirements of AAMA/WDMA 101/I.S.2. Our products meet a Design Press (DP) rating of 35 (double hung) to as high as DP70 on our operating casement (gateway size 24" x 60"). With advanced-level engineering and top-notch innovation, you are assured of the most durable, high-performing windows available nationwide.



#### INTERFORCE II™

Our Premium windows feature Interforce II<sup>™</sup> internal fiberglass reinforced meeting rails for unsurpassed strength and durability.



#### WARM EDGE TECHNOLOGY

The Warm Edge glass spacer system within Ply Gem Premium Series Replacement windows reduces thermal transfer around the glass perimeter by utilizing a unique U-shaped channel to separate glass panes and interrupt the natural flow of heat to cold. Warm Edge is one continuous piece creating a stronger, more energyefficient insulated glass unit. Plus it flexes with glass expansion and contraction to ensure a strong seal for the life of the window.



#### WARM EDGE+ TECHNOLOGY

The Warm Edge+ Spacer System has all of the features of the Warm Edge Spacer, but utilizes a new, less conductive material which provides a lower U-Factor.



#### **R-CORE® INSULATION**

The vinyl mainframes of Ply Gem Premium Series windows are filled with patented<sup>†</sup> R-Core<sup>®</sup> insulation (pre-expanded high-density solid polyurethane), the same type used in many refrigerator/freezer doors. It prevents voids and settling and results in even distribution of the maximum insulating barrier. Premium Series windows with Energy Package (EP – see page 9 for details) upgrades feature R-Core in both the frame and sash for the ultimate in thermal performance. <sup>†</sup>U.S. Patent Number: 4,516,356



#### NEW GENERATION VINYL

Wood or metal windows can stick when they swell or deteriorate from corrosion. New Generation Vinyl withstands harsh weather as well as wear and tear better. Ply Gem Premium Series Replacement windows are constructed with rugged, maintenance-free New Generation uiPVC. Its low conductivity and high energyefficiency properties are ideal for Ply Gem's advanced window construction. And because vinyl's base color is solid through and through, you'll never need to paint or stain these windows.



#### PINCH FUSION WELDING

Ply Gem Premium Series Replacement windows are entirely fusion-welded – sashes and mainframes – to create a solid, one-piece unit that maintains its strength over the years. Our state-of-the-art fusion process ensures frame and sash corners won't have the excess variance found with other welding techniques.



#### SIL LOCK

Premium double hung windows with SilLock are built with a sloped sill which forces water to drain to the exterior of the window, keeping your windows dry. This unique design also ensures a tight weatherstrip contact at the sill.



#### **COASTAL HARDWARE**

Typical hardware can easily become corroded or damaged when exposed to constant salt in the air. Ply Gem casement windows with optional coastal hardware will consistently stand up to saltwater and other harsh coastal conditions.

### PREMIUM SERIES REPLACEMENT

**PREMIUM SERIES REPLACEMENT** windows are available in double hung, sliding, casement & awning, garden, bay & bow and sliding patio doors. A number of grilles, glass packages and color options as well as designer glass are also available.



Ply Gem, the Ply Gem logo, the "Building Products. Building Success." slogan, Ply Gem Windows and the Ply Gem Windows logo are trademarks of Ply Gem Industries, Inc. R-Core and Advanced Easy Clean are registered trademarks of Ply Gem Windows. ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. ©2018 Ply Gem Industries, Inc.

For more information, call 888-9PLYGEM.

