

MIRA  
**PREMIUM SERIES**

W I N D O W S

**TABLE OF CONTENTS**

Double Hung .....	6
Casement & Awning .....	8
Casement Operating Shapes .....	10
French Sliding Patio Door .....	12
Hinged Patio Door .....	14
French Outswing Patio Door .....	16
French Inswing Patio Door .....	18
NFRC Thermal Performance Data .....	20-21
Explanation of Glass Packages .....	21
Low-E & ENERGY STAR® Information .....	22
Glass Options, Screens & Impact Product Information .....	23
Grille Patterns & Grille Styles .....	24
Exterior Casing Options & Extension Jambes .....	25
Hardware Finishes & Color Options .....	26
Architectural Shapes .....	27

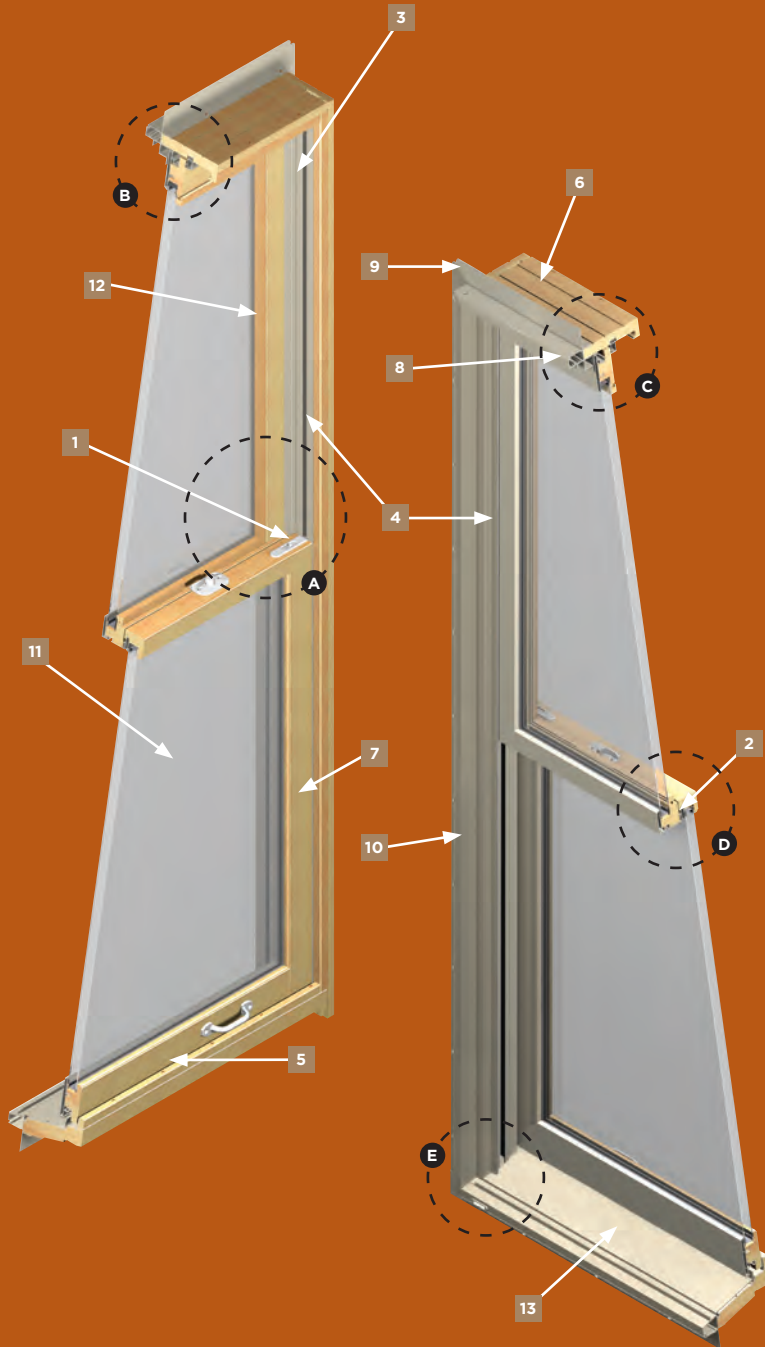


## DOUBLE HUNG

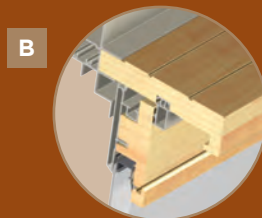
**MIRA PREMIUM SERIES DOUBLE HUNG** windows feature tilt-in sashes to make cleaning a breeze, weatherstripping for air-tight performance, and cam-action sash locks for added security. A wide bottom rail, 14° sloped sill and sturdy 6/4 sash construction help create a historically accurate design while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

## FEATURES

- 1 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 9/16" 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 (also available in pre-finished white)
- 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 reduces energy costs while reducing fabric fading (optional HP<sup>SC</sup> or HP2+ glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 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



Flush-mounted tilt latches and lock and keeper with matching finish fasteners create a clean, high-quality appearance



One-piece, full 4 9/16" head and side jambs with inside stop blind nailed to reduce the number of visible nail holes



Accessory grooves for mulling and casing application, screen pocket in head and sill for spring-loaded screen



Aluminum sash interlock provides superior structural performance



Water management system for increased water performance

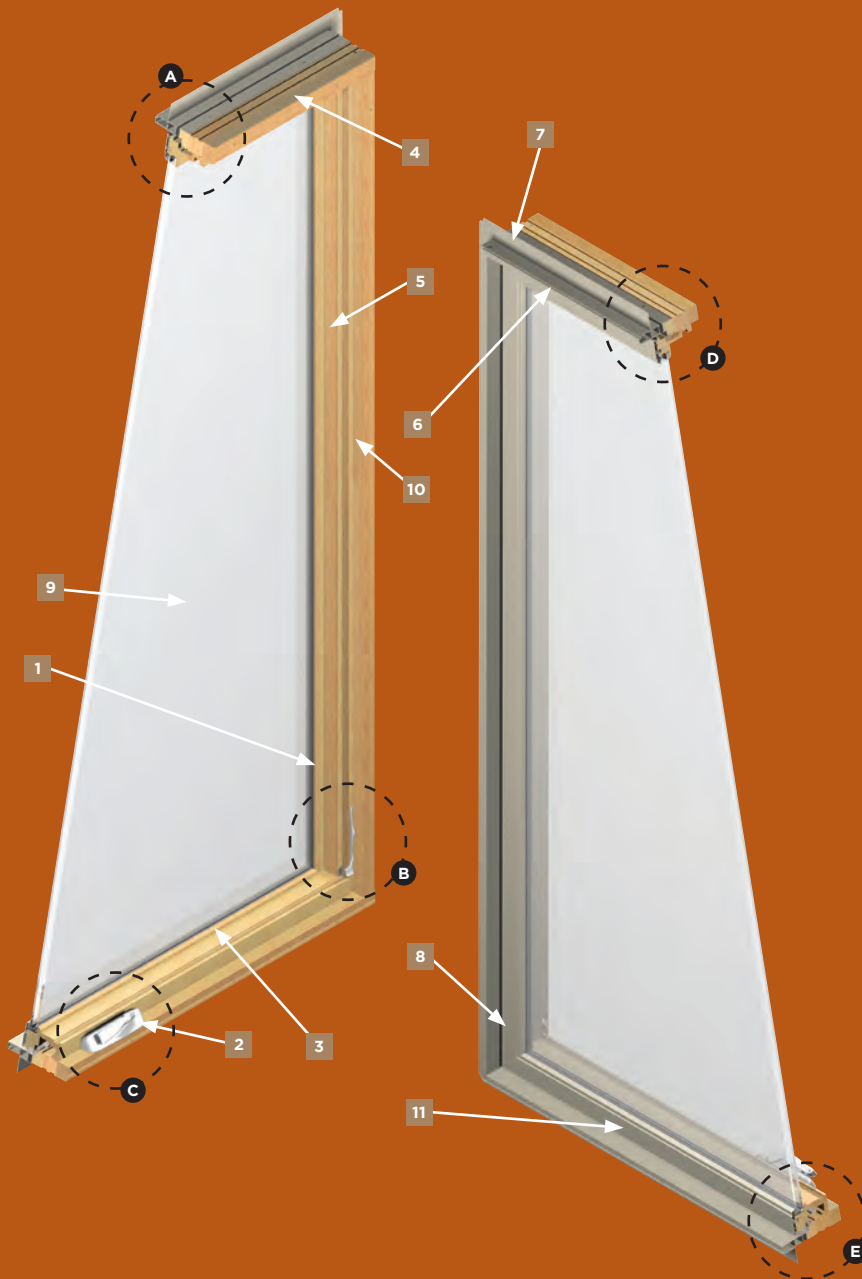


## CASEMENT & AWNING

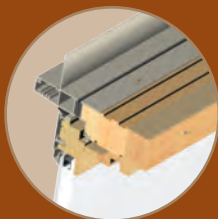
**MIRA PREMIUM SERIES CASEMENT & AWNING** windows are proof that structural integrity and high performance can be beautiful. They feature a recessed sash, a sleek, fold-down handle that won't interfere with window treatments, and a 90° opening sash providing maximum air flow and easy cleaning. All this, while providing superior resistance to water and air infiltration.

## 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>" jamb 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 (also available in pre-finished white)
- 6 Integral face groove allows for easy mulling and exterior accessory application
- 7 Pre-punched nailing fin for simple installation
- 8 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 9 Energy-efficient Warm Edge insulating HP glass reduces energy costs while reducing fabric fading (optional HP<sup>SC</sup> or HP2+ glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 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



A



6/4 overall sash width for historical wood look, while recessed sash provides resistance to water infiltration

B



One lever lock with multi-point keeper system for a secure, weather-tight seal

C



Sleek fold-down crank handle

D



Accessory grooves for mulling and casing application

E



Thermally broken frame for increased thermal performance



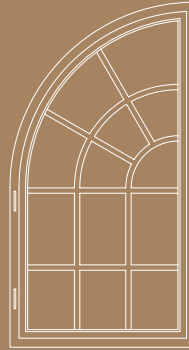
## CASEMENT OPERATING SHAPES

Mira Premium Series from Ply Gem Windows offer 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.

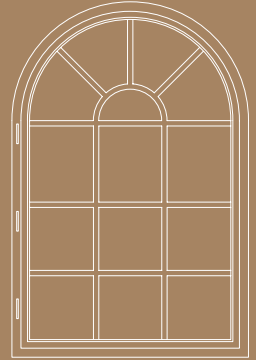
# CASEMENT OPERATING SHAPES



Extended Quarter Round Units



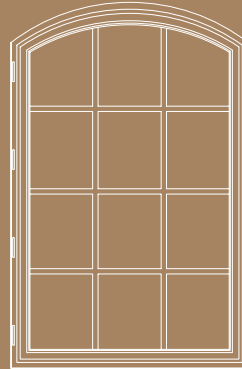
Extended Round Units  
(Standard Colonial Grille Pattern)



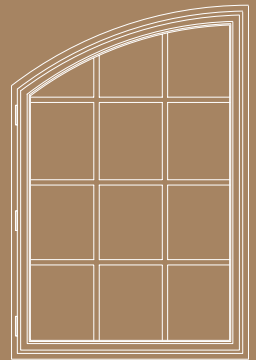
Optional Gothic Grille Pattern



Extended Eyebrow Units  
(Standard Colonial Grille Pattern)



Extended Quarter Eyebrow Units



Optional Renaissance Grille Pattern





## FRENCH SLIDING PATIO DOOR

**MIRA PREMIUM SERIES 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.

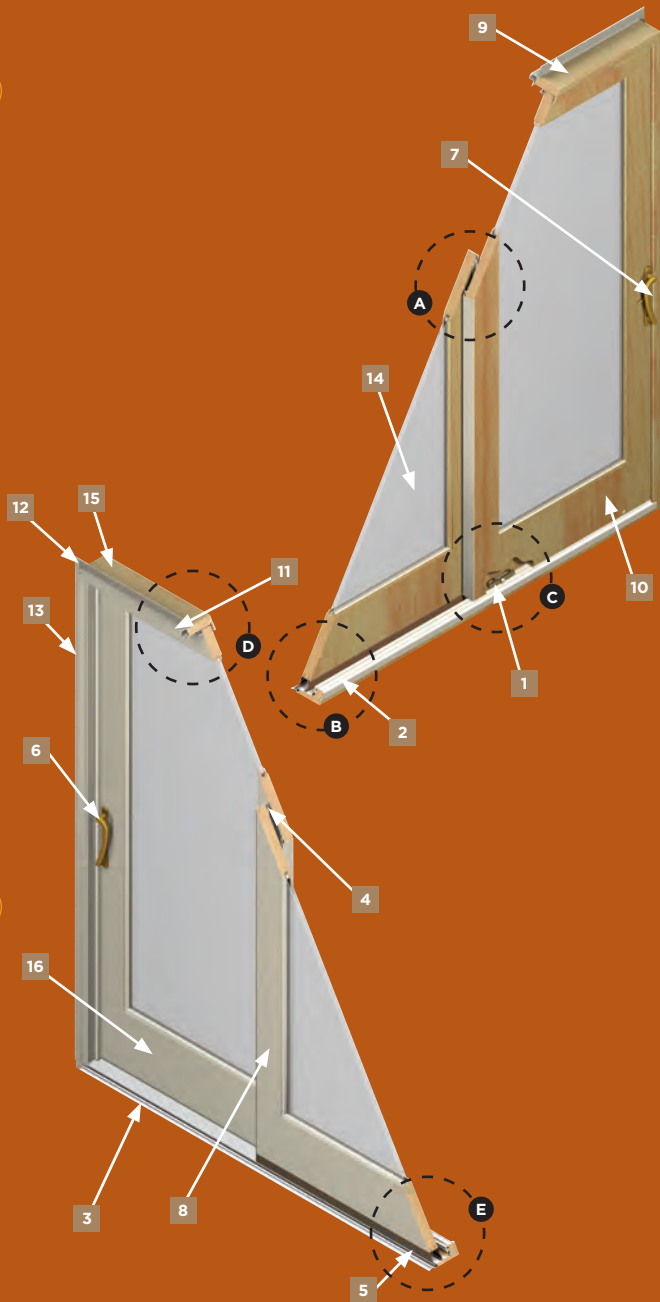


# FRENCH SLIDING PATIO DOOR



## FEATURES

- 1 Stainless steel rollers for smooth operation and long-lasting performance
- 2 Durable stainless steel track on interior of the sill for smooth sliding operation
- 3 Aluminum sill deck with wood support to prevent sag and resist dents
- 4 Hollow and foam filled bulb weatherstripping over the full height of the door for reduced air infiltration
- 5 Hollow and foam filled bulb weatherstripping for increased protection against leaks
- 6 Handle set available in bright brass, antique brass, oil rubbed bronze or satin nickel with matching hinge and strike
- 7 2-point locking system
- 8 1 3/4" panels with wide stiles and rails for a true French look—available in full, 3/4 or 1/2 lite panels
- 9 4 9/16" or 6 9/16" jambs made of clear wood eliminate extensive drywall work
- 10 Select clear wood ready for paint or stain to match any interior décor (also available in pre-finished white)
- 11 Integral face groove allows for easy mulling and exterior accessory application
- 12 Pre-punched nailing fin for simple installation
- 13 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 14 Energy-efficient Warm Edge insulating tempered HP glass reduces energy costs while reducing fabric fading (optional HP<sup>sc</sup>, HP2+ or HP2+<sup>sc</sup> glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 15 Vacuum-treated, solid wood components resist damage from water and fungus
- 16 Durable .050 extruded aluminum cladding on exterior surfaces of panels and frame resists dings and dents while providing structural integrity



**A** Hollow and foam filled bulb weatherstripping over the full height of the door for reduced air infiltration



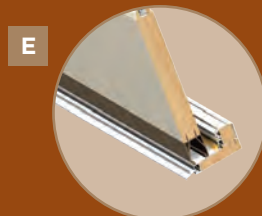
**B** Durable stainless steel track on interior of the sill for smooth sliding operation



**C** Stainless steel rollers for smooth operation and long-lasting performance



**D** Accessory grooves for mulling and casing application



**E** Hollow and foam filled bulb weatherstripping for increased protection against leaks

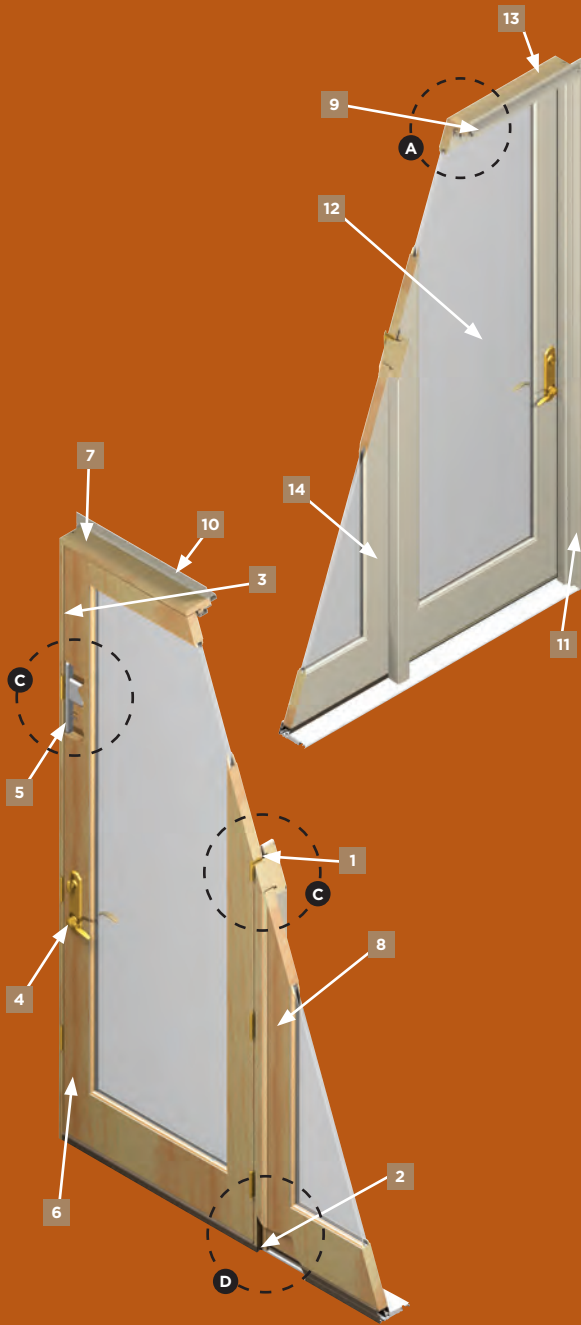
1. HP glass combines Low-E with argon gas fill for high performance. 2. Units up to call size 6080 are rated DP50 straight out of the box. 3. Optional ADA-compliant sill ramp available on 8-0 width French Sliding Patio Doors with 4 9/16" and 6 9/16" jambs; exterior ramp is a light bronze anodized finish with a natural oak interior ramp that can be finished to match any décor.



## HINGED PATIO DOOR

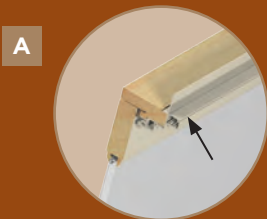
**MIRA PREMIUM SERIES HINGED PATIO DOORS** elevate elegance and performance to a new level, the historically accurate styling of these doors are designed to let tradition reign. With warm edge insulating Low-E glass and argon gas fill plus full-perimeter weatherstripping, our attention to energy efficiency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





## FEATURES

- 1 Ball bearing hinges are standard for smooth operation
- 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 Handle set available in bright brass, antique brass, oil rubbed bronze or satin nickel with matching hinge and strike—in traditional or contemporary styles
- 5 Multi-point lock system
- 6 1¾" panels with wide stiles and rails for a true French look—available in full, ¾ or ½ lite panels
- 7 4<sup>9</sup>/<sub>16</sub>" or 6<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 8 Select clear wood ready for paint or stain to match any interior décor (also available in pre-finished white)
- 9 Integral face groove allows for easy mulling and exterior accessory application
- 10 Pre-punched nailing fin for simple installation
- 11 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 12 Energy-efficient Warm Edge insulating tempered HP glass reduces energy costs while reducing fabric fading (optional HP<sup>SC</sup>, HP2+ or HP2+<sup>SC</sup> glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 13 Vacuum-treated, solid wood components resist damage from water and fungus
- 14 Durable .050 extruded aluminum cladding on exterior surfaces of panels and frame resists dings and dents while providing structural integrity



**A** Integral face groove allows for easy mulling and exterior accessory application



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



**C** Ball bearing hinges are standard for smooth operation



**D** Center mull is integrated into the sill design for higher structural performance

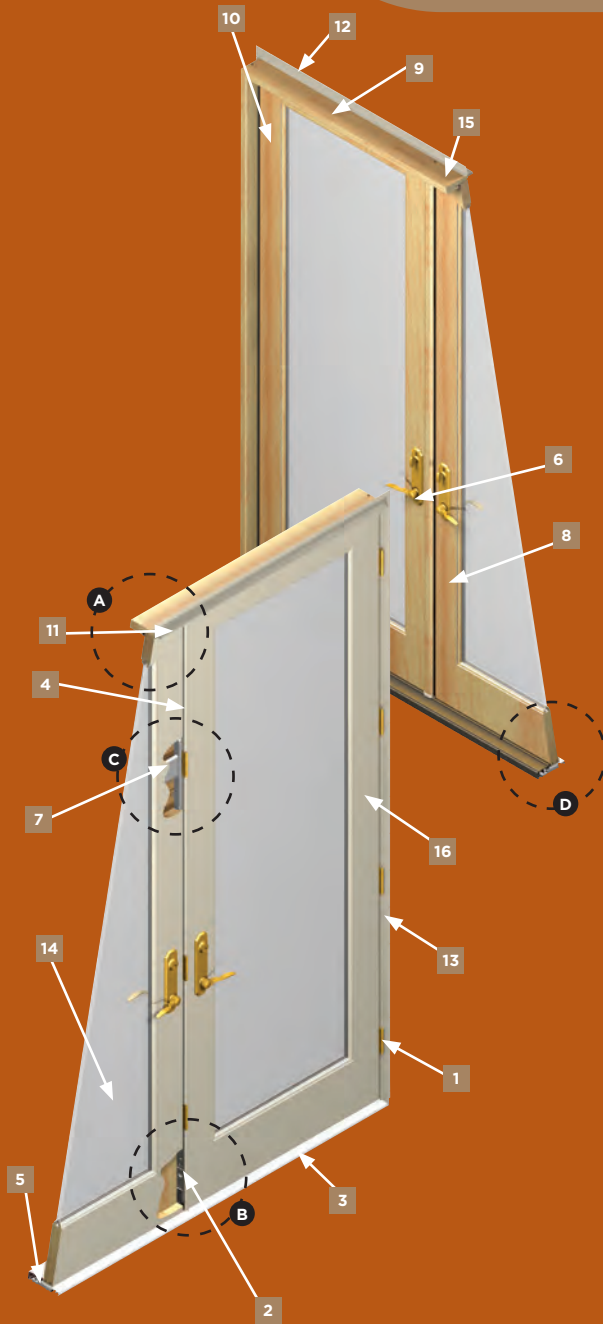
1. HP glass combines Low-E with argon gas fill for high performance. 2. Units up to call size 6080 are rated DP50 straight out of the box. 3. Available option. 4. Optional ADA-compliant sill ramp available on 3-0 width Hinged Patio Doors with 4<sup>9</sup>/<sub>16</sub>" and 6<sup>9</sup>/<sub>16</sub>" jambs; exterior ramp is a light bronze anodized finish with a natural oak interior ramp that can be finished to match any décor.



## FRENCH OUTSWING PATIO DOOR

**MIRA PREMIUM SERIES FRENCH OUTSWING PATIO DOORS** provide classic style coupled with unbeatable performance, this high-quality, aluminum-clad wood patio door features ball-bearing hinges for smooth operation. Warm edge insulating Low-E glass and argon gas fill, double weatherstrip sealing and a bumper sill provide extra energy efficiency, while wide stiles and rails give you a true French look.

# FRENCH OUTSWING PATIO DOOR



## FEATURES

- 1 Ball bearing hinges are standard for smooth operation
- 2 Locking flush bolts at the 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 Handle set available in bright brass, antique brass, oil rubbed bronze or satin nickel with matching hinge and strike—in traditional or contemporary styles
- 7 Multi-point lock system
- 8 1¾" panels with wide stiles and rails for a true French look—available in full, ¾ or ½ lite panels
- 9 4<sup>9</sup>/<sub>16</sub>" or 6<sup>9</sup>/<sub>16</sub>" jambs made of clear wood eliminate extensive drywall work
- 10 Select clear wood ready for paint or stain to match any interior décor (also available in pre-finished white)
- 11 Integral face groove allows for easy mulling and exterior accessory application
- 12 Pre-punched nailing fin for simple installation
- 13 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 14 Energy-efficient Warm Edge insulating tempered HP glass reduces energy costs while reducing fabric fading (optional HP<sup>SC</sup>, HP2+ or HP2+<sup>SC</sup> glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 15 Vacuum-treated, solid wood components resist damage from water and fungus
- 16 Durable .050 extruded aluminum cladding on exterior surfaces of panels and frame resists dings and dents while providing structural integrity



1. HP glass combines Low-E with argon gas fill for high performance. 2. Units up to call size 6080 are rated DP50 straight out of the box. 3. Available option. 4. Impact Rated units are available in select sizes and configurations.



## FRENCH INSWING PATIO DOOR

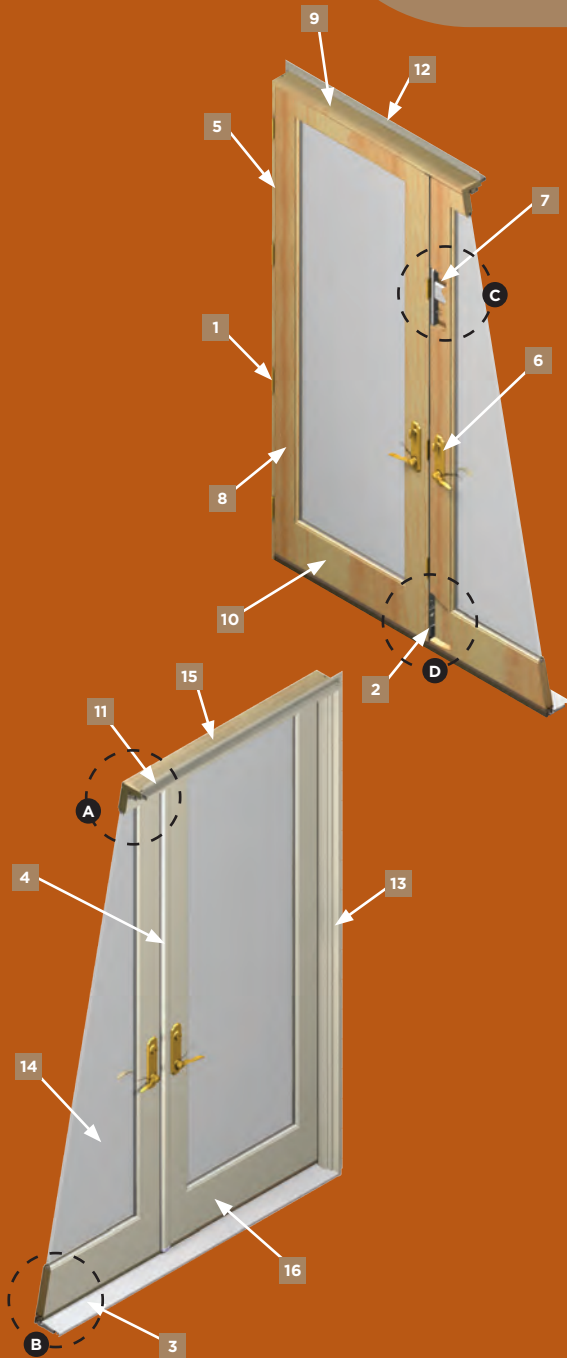
**MIRA PREMIUM SERIES FRENCH INSWING PATIO DOORS** provide classic style and unbeatable performance, these doors feature wide stiles and rails coupled with 1 $\frac{1}{4}$ " door panels to give you a true French look. Ball-bearing hinges allow for smooth operation, while Warm Edge Low-E insulating glass and argon gas fill, plus full-perimeter weatherstripping keep you comfortable in any season.

# FRENCH INSWING PATIO DOOR



## FEATURES

- 1 Ball bearing hinges are standard for smooth operation
- 2 Locking flush bolts at the 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 Handle set available in bright brass, antique brass, oil rubbed bronze or satin nickel with matching hinge and strike—in traditional or contemporary styles
- 7 Multi-point lock system
- 8 1 3/4" panels with wide stiles and rails for a true French look—available in full, 3/4 or 1/2 lite panels
- 9 4 9/16" or 6 9/16" jambs made of clear wood eliminate extensive drywall work
- 10 Select clear wood ready for paint or stain to match any interior décor (also available in pre-finished white)
- 11 Integral face groove allows for easy mulling and exterior accessory application
- 12 Pre-punched nailing fin for simple installation
- 13 AAMA 2604 paint finish provides superior resistance to chalking and fading
- 14 Energy-efficient Warm Edge insulating tempered HP glass reduces energy costs while reducing fabric fading (optional HP<sup>SC</sup>, HP2+ or HP2+<sup>SC</sup> glass upgrade and optional Warm Edge+ spacer system upgrade available for enhanced performance)
- 15 Vacuum-treated, solid wood components resist damage from water and fungus
- 16 Durable .050 extruded aluminum cladding on exterior surfaces of panels and frame resists dings and dents while providing structural integrity

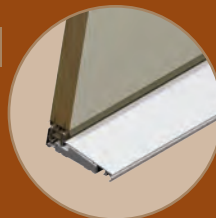


A



Integral face groove allows for easy mulling and exterior accessory application

B



Aluminum sill deck to prevent sag and resist dents

C



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

D



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

1. HP glass combines Low-E with argon gas fill for high performance. 2. Units up to call size 6080 are rated DP50 straight out of the box. 3. Available option. 4. Optional ADA-compliant sill ramp available on 6-0 width French Inswing Patio Doors with 4 9/16" and 6 9/16" jambs; exterior ramp is a light bronze anodized finish with a natural oak interior ramp that can be finished to match any décor.

# NFRC THERMAL PERFORMANCE DATA

## DOUBLE HUNG

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.04	0.49	0.58	0.60
3/4" Low-E	2.70	0.37	0.27	0.51
3/4" Low-E <sup>SC</sup>	2.78	0.36	0.21	0.40
3/4" Low-E2+	3.03	0.33	0.26	0.49
3/4" HP Glass	3.03	0.33	0.27	0.51
3/4" HP <sup>SC</sup> Glass	3.03	0.33	0.20	0.40
3/4" HP2+ Glass	3.23	0.31	0.26	0.49
<b>WITH WARM EDGE+</b>				
3/4" Low-E	2.86	0.35	0.27	0.51
3/4" Low-E <sup>SC</sup>	2.86	0.35	0.21	0.40
3/4" Low-E2+	3.13	0.32	0.26	0.49
3/4" HP Glass	3.23	0.31	0.27	0.51
3/4" HP <sup>SC</sup> Glass	3.23	0.31	0.20	0.40
3/4" HP2+ Glass	3.33	0.30	0.26	0.49

## CASEMENT

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.33	0.43	0.43	0.45
3/4" Low-E	2.94	0.34	0.20	0.38
3/4" Low-E <sup>SC</sup>	3.03	0.33	0.16	0.30
3/4" Low-E2+	3.45	0.29	0.20	0.37
3/4" HP Glass	3.23	0.31	0.20	0.38
3/4" HP <sup>SC</sup> Glass	3.23	0.31	0.15	0.30
3/4" HP2+ Glass	3.70	0.27	0.20	0.37
<b>WITH WARM EDGE+</b>				
3/4" Low-E	3.03	0.33	0.20	0.38
3/4" Low-E <sup>SC</sup>	3.03	0.33	0.16	0.30
3/4" Low-E2+	3.45	0.29	0.20	0.37
3/4" HP Glass	3.45	0.29	0.20	0.38
3/4" HP <sup>SC</sup> Glass	3.45	0.29	0.15	0.30
3/4" HP2+ Glass	3.70	0.27	0.20	0.37

## AWNING

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.27	0.44	0.43	0.45
3/4" Low-E	2.94	0.34	0.20	0.38
3/4" Low-E <sup>SC</sup>	2.94	0.34	0.16	0.30
3/4" Low-E2+	3.33	0.30	0.20	0.37
3/4" HP Glass	2.23	0.31	0.20	0.38
3/4" HP <sup>SC</sup> Glass	3.23	0.31	0.15	0.30
3/4" HP2+ Glass	3.45	0.29	0.20	0.37
<b>WITH WARM EDGE+</b>				
3/4" Low-E	3.03	0.33	0.20	0.38
3/4" Low-E <sup>SC</sup>	3.03	0.33	0.16	0.30
3/4" Low-E2+	3.33	0.30	0.20	0.37
3/4" HP Glass	3.45	0.29	0.20	0.38
3/4" HP <sup>SC</sup> Glass	3.45	0.29	0.15	0.30
3/4" HP2+ Glass	3.57	0.28	0.20	0.37

## FRENCH SLIDING PATIO DOOR

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.00	0.50	0.46	0.47
3/4" Low-E	2.50	0.40	0.22	0.40
3/4" Low-E <sup>SC</sup>	2.56	0.39	0.17	0.31
3/4" Low-E2+	2.78	0.36	0.22	0.39
3/4" Low-E2+ <sup>SC</sup>	2.78	0.36	0.17	0.31
3/4" HP Glass	2.70	0.37	0.22	0.40
3/4" HP <sup>SC</sup> Glass	2.70	0.37	0.17	0.31
3/4" HP2+ Glass	2.94	0.34	0.21	0.39
3/4" HP2+ <sup>SC</sup> Glass	2.94	0.34	0.16	0.31
<b>WITH WARM EDGE+</b>				
3/4" Low-E	2.63	0.38	0.22	0.40
3/4" Low-E <sup>SC</sup>	2.63	0.38	0.17	0.31
3/4" Low-E2+	2.86	0.35	0.22	0.39
3/4" Low-E2+ <sup>SC</sup>	2.86	0.35	0.17	0.31
3/4" HP Glass	2.78	0.36	0.22	0.40
3/4" HP <sup>SC</sup> Glass	2.86	0.35	0.17	0.31
3/4" HP2+ Glass	3.03	0.33	0.21	0.39
3/4" HP2+ <sup>SC</sup> Glass	3.03	0.33	0.16	0.31

## HINGED PATIO DOOR

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.27	0.44	0.36	0.37
3/4" Low-E	2.70	0.37	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.78	0.36	0.14	0.25
3/4" Low-E2+	2.94	0.34	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	2.94	0.34	0.13	0.24
3/4" HP Glass	2.86	0.35	0.17	0.32
3/4" HP <sup>SC</sup> Glass	2.94	0.34	0.13	0.25
3/4" HP2+ Glass	3.13	0.32	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.13	0.32	0.13	0.24
<b>WITH WARM EDGE+</b>				
3/4" Low-E	2.78	0.36	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.86	0.35	0.14	0.25
3/4" Low-E2+	3.03	0.33	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	3.03	0.33	0.13	0.24
3/4" HP Glass	3.03	0.33	0.17	0.32
3/4" HP <sup>SC</sup> Glass	3.03	0.33	0.13	0.25
3/4" HP2+ Glass	3.23	0.31	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.23	0.31	0.13	0.24

### 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: 3/4" IGU, 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

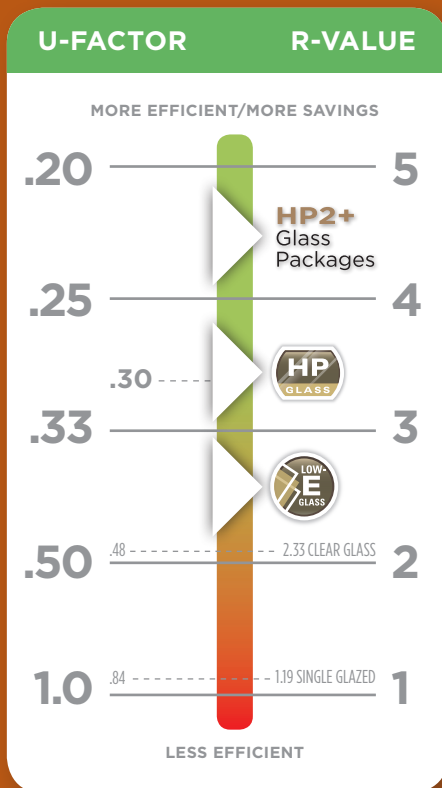
	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.27	0.44	0.36	0.37
3/4" Low-E	2.70	0.37	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.78	0.36	0.14	0.25
3/4" Low-E2+	2.94	0.34	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	2.94	0.34	0.13	0.24
3/4" HP Glass	2.86	0.35	0.17	0.32
3/4" HP <sup>SC</sup> Glass	2.94	0.34	0.13	0.25
3/4" HP2+ Glass	3.13	0.32	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.13	0.32	0.13	0.24
<b>WITH WARM EDGE+</b>				
3/4" Low-E	2.78	0.36	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.86	0.35	0.14	0.25
3/4" Low-E2+	3.03	0.33	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	3.03	0.33	0.13	0.24
3/4" HP Glass	3.03	0.33	0.17	0.32
3/4" HP <sup>SC</sup> Glass	3.03	0.33	0.13	0.25
3/4" HP2+ Glass	3.23	0.31	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.23	0.31	0.13	0.24

## FRENCH OUTSWING PATIO DOOR

	R Value	NFRC CERTIFIED		
		U Factor	SHGC	VT
<b>WITH WARM EDGE</b>				
3/4" Clear	2.33	0.43	0.36	0.37
3/4" Low-E	2.86	0.35	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.86	0.35	0.14	0.25
3/4" Low-E2+	3.13	0.32	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	3.13	0.32	0.13	0.24
3/4" HP Glass	3.03	0.33	0.17	0.32
3/4" HP <sup>SC</sup> Glass	3.03	0.33	0.13	0.25
3/4" HP2+ Glass	3.23	0.31	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.23	0.31	0.13	0.24
<b>WITH WARM EDGE+</b>				
3/4" Low-E	2.94	0.34	0.17	0.32
3/4" Low-E <sup>SC</sup>	2.94	0.34	0.14	0.25
3/4" Low-E2+	3.23	0.31	0.17	0.31
3/4" Low-E2+ <sup>SC</sup>	3.23	0.31	0.13	0.24
3/4" HP Glass	3.13	0.32	0.17	0.32
3/4" HP <sup>SC</sup> Glass	3.13	0.32	0.13	0.25
3/4" HP2+ Glass	3.33	0.30	0.17	0.31
3/4" HP2+ <sup>SC</sup> Glass	3.33	0.30	0.13	0.24

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

## 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.



### 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 altitude 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

‡ *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. HP glass packages are also available in solar cooling (<sup>SC</sup>) 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.

**HP2+<sup>SC</sup>** — One lite of Low-E and one lite of Interior Surface Low-E with argon gas fill.

# 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.

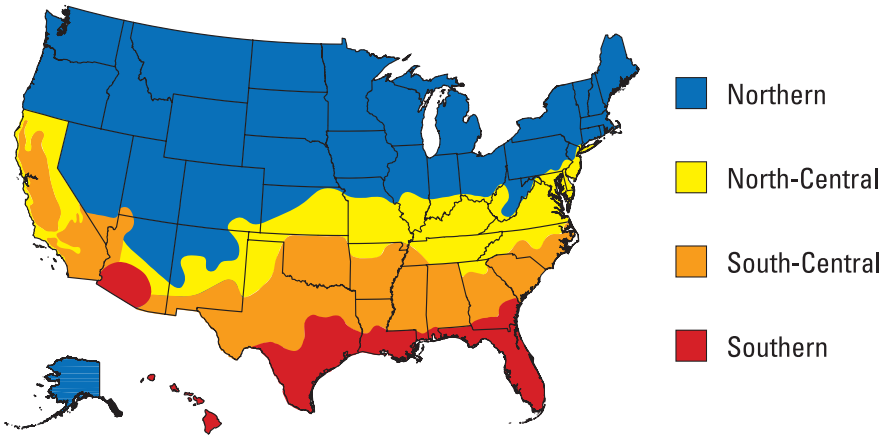
Ply Gem's Low-E glass has many advantages such as minimal visible darkening. Our glass minimizes interior glare, reducing eyestrain and making it easier to watch television or look at a computer screen when bright sunlight fills a room.

# ENERGY STAR®



LEARN MORE AT  
energystar.gov

## ENERGY STAR® for Windows, Doors, and Skylights CLIMATE ZONE MAP



Ply Gem Mira 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, not to mention increase the comfort level inside your home.



PLY GEM MIRA PREMIUM SERIES WINDOWS HAVE BEEN GREEN APPROVED BY THE NAHB RESEARCH CENTER.

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



## GLASS OPTIONS

- Low-E
- Low-E<sup>SC</sup>
- Low-E2+
- Low-E2+<sup>SC</sup>
- HP
- HP<sup>SC</sup>
- HP2+
- HP2+<sup>SC</sup>

\* Tempered glass is standard on sliding patio doors.

NOTE: Low-E glass packages available to address high altitude applications. See page 21 for explanation of glass packages. Contact your Ply Gem Windows sales representative for a full list of Mira Premium glass thickness options and ratings.

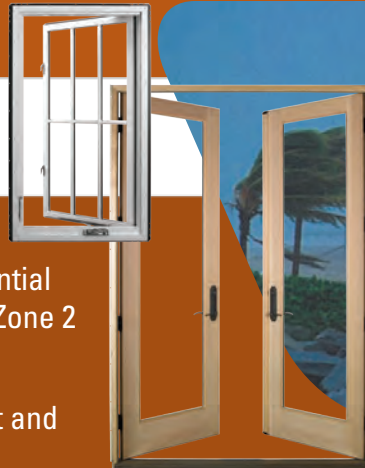
- Tinted
- Obscure
- Tempered\*
- Laminated  
(security)
- Sound Package  
(off-set glass)

## 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.



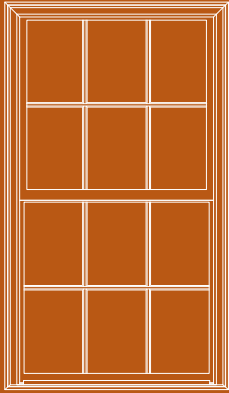
## IMPACT RATED



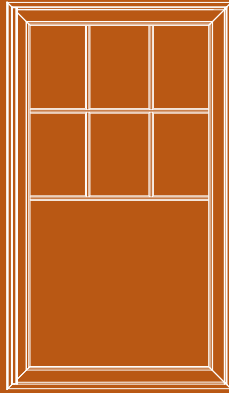
- Rated in accordance with International Residential Codes and meets impact requirements in U.S. Zone 2 (110-120 mph) and Zone 3 (120-140 mph).
- Passes ASTM E1886/1996 Large Missile Impact and Cycling Tests.
- Meets AAMA/WDMA/CSA 101/I.S.2/A440 standards. Florida Building Commission approved.
- Meets 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 DP50 performance.
- Casement units feature corrosion-resistant coastal hardware and are constructed to meet DP60 performance.
- French outswing patio doors feature corrosion-resistant coastal hardware in bright brass or satin nickel finishes and are constructed to meet DP50 performance.

# STANDARD GRILLE PATTERNS

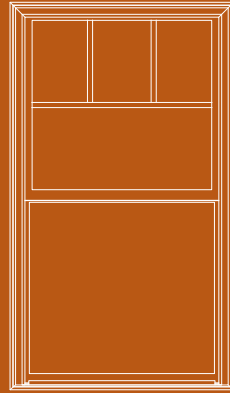
Call customer service for optional grille patterns (800.999.8400)



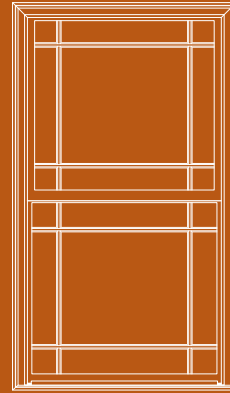
Colonial



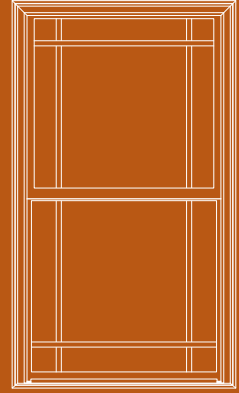
Half Colonial  
(shown on Casement)



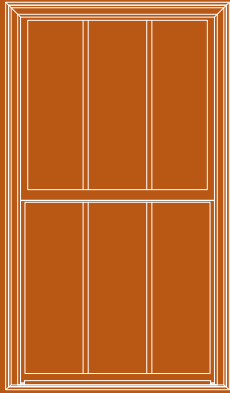
Plaza



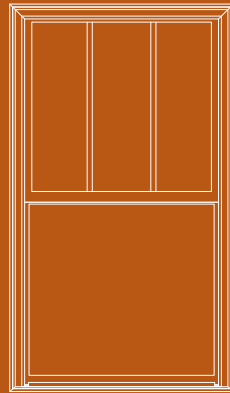
Prairie



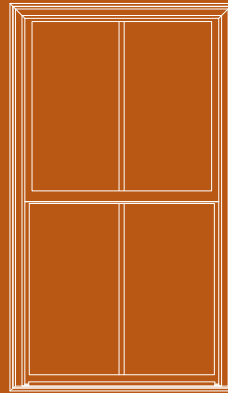
Perimeter Prairie



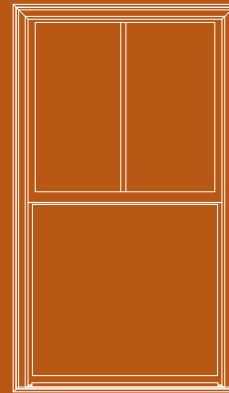
Three over Three



Three over One



Two over Two



Two over One

## GRILLE STYLES



5/8" Flat GBG



7/8" Flat GBG



5/8" Sculptured  
GBG



1" Contoured  
GBG



7/8" SDL



1 1/4" SDL



7/8" Full Surround  
Removable Grilles

GBG = Grilles Between the Glass

SDL = Simulated Divided Light

## EXTERIOR CASING OPTIONS



J Channel\*



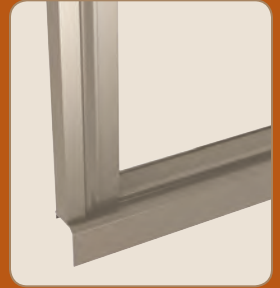
180 Brick Mould



3 1/4" Williamsburg\*



3 1/2" Flat\*



Sill Nose  
across bottom only

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

## EXTENSION JAMBS

Available in primed or natural "clear" wood custom from 4 9/16" to 8 9/16" for windows. Consult a Ply Gem sales representative about the details and your specific requirements.



# HARDWARE & FINISH OPTIONS\*

## BRIGHT BRASS



HINGED DOOR HANDLE  
(EXTERIOR)

SASH  
LOCK

## ANTIQUE BRASS



HINGED DOOR HANDLE  
(INTERIOR)

SASH  
LOCK

## SATIN NICKEL



HINGED DOOR HANDLE  
(EXTERIOR)

SASH  
LOCK

## OIL RUBBED BRONZE



HINGED DOOR HANDLE  
(INTERIOR)

SASH  
LOCK



CASEMENT & AWNING  
HANDLE & LOCK



CASEMENT & AWNING  
HANDLE & LOCK



CASEMENT & AWNING  
HANDLE & LOCK



CASEMENT & AWNING  
HANDLE & LOCK

## WHITE



SASH  
LOCK

CASEMENT & AWNING  
HANDLE & LOCK

## SANDALWOOD



SASH  
LOCK

CASEMENT & AWNING  
HANDLE & LOCK

## TAUPE



SASH  
LOCK

CASEMENT & AWNING  
HANDLE & LOCK

\* French outswing impact patio door handles feature PVD (coastal) finishes and are only available in traditional style, and in bright brass and satin nickel.

# COLOR OPTIONS



WHITE



SANDALWOOD



TAUPE



EVERGREEN



IVORY



COTTAGE  
RED



BLACK



DARK  
BRONZE

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



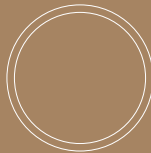
## ARCHITECTURAL SHAPES



Triangle



Pentoid



Full Round



Oval



Octagon



Right Triangle



Rectangle



Eye brow



Elliptical



Clip Trapezoid



Quarter Circle



Circle Head



Arch Transom



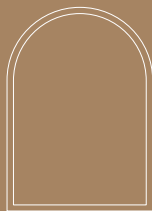
Segmented Arch Transom



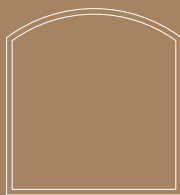
Trapezoid Transom



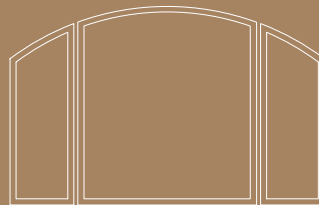
Ext. Quarter Circle



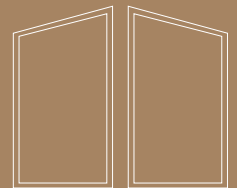
True Radius



Arch



Segmented Arch Picture



Trapezoid Picture