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.  

Building success.
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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 one-of-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 energy-efficiency and long-lasting quality in mind.
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.
**STANDARD FEATURES**

1. **Tilt-in sash design for easy cleaning from the safety of inside your home**
2. **Sash interlock provides superior structural performance**
3. **Stopped jamb liner design for superior structural performance while maximizing available daylight opening**
4. **Three-piece jamb liner allows for different interior and exterior jamb liner colors**
5. **6/4 sash construction for historically accurate wood window look**
6. **4 4/16" jamb 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 HP2+, HP2+, HP2+SC, HP2+SC or HP2+PS**
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**

---

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

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- **A**: Flush-mounted tilt latches and lock and keeper with matching finish fasteners create a clean, high-quality appearance
- **B**: One-piece, full 4 4/16" head and side jams with inside stop blind nailed to reduce the number of visible nail holes
- **C**: Aluminum sash interlock provides superior structural performance
- **D**: Accessory grooves for mulling and casing application, screen pocket in head and sill for spring-loaded screen
- **E**: Water management system for increased water 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 7/8" 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

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

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

Sleek fold-down crank handle

Accessory grooves for mulling and casing application

Standard stainless steel hardware approved for coastal use

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.
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 Quarter Round Units
- Extended Round Units (Standard Hub and Spoke Grille Pattern)
- Extended Eyebrow Units (Standard Colonial Grille Pattern)
- Extended Quarter Eyebrow Units
- Optional Gothic Grille Pattern
- Optional Renaissance Grille Pattern
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.
STANDARD FEATURES

1. Stainless steel rollers for smooth operation and long-lasting 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 stiles and rails for a true French look
6. 4¾" 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, HP2+, HP2MAX, HP2MAXSC, HP3MAX, or HP3MAXSC
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

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. Impact Rated units are available in select sizes and configurations.
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

1. Stainless steel rollers for smooth operation and long lasting 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 ½" tall finseal weatherstripping for increased protection against leaks for reduced air infiltration
4. Durable .080 extruded aluminum cladding on exterior surface of panels and .050 extruded aluminum cladding on frames resists dings and dents while providing structural integrity
5. Multi-point lock system
6. 1¾" panels with wide stiles and rails for an authentic French look
7. Select clear wood interior ready for paint or stain to match any interior décor (also available primed or prefinished in white, black or off-white)
8. Integral face groove allows for easy mulling and exterior accessory application
9. Energy-efficient Warm Edge insulating tempered HP glass (Low-E/argon gas fill) helps reduce energy costs and fabric fading
10. AAMA 2604 paint finish provides superior resistance to chalking and fading

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

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: Hollow and foam filled bulb weatherstripping for increased protection against leaks
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.
5. 1 3/4” panels with wide stiles and rails for a true French look.
6. 4 7/16” 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 insulated tempered HP glass helps reduce energy costs and fabric fading — optional HP®c, HP2+, HP2+SC, HP2MAX, HP2MAXc, HP3MAX or HP3MAXc.
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 DOORS

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 energy-efficiency, while wide stiles and rails give you a true French look.

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. 4½” 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 HP2+, HP2+SC, HP2MAX, HP2MAXSC, HP3MAX or HP3MAXSC
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

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

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

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.
MIRA ALUMINUM-CLAD WOOD FRENCH INSWING PATIO DOORS provide classic style and unbeatable performance. These doors feature wide stiles and rails coupled with 1⅜" 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.
# French Inswing Patio Door

## STANDARD FEATURES

<table>
<thead>
<tr>
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<th>Feature Description</th>
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<tr>
<td>1</td>
<td>Adjustable hinges are standard for smooth operation</td>
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<td>2</td>
<td>Handle activated shoot bolts at the head and sill for added security</td>
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<tr>
<td>3</td>
<td>Aluminum sill deck to prevent sag and resist dents</td>
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<td>4</td>
<td>Aluminum astragal with stainable wood interior</td>
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<tr>
<td>5</td>
<td>Full-perimeter weatherstripping for air-tight performance and smooth operation</td>
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<td>6</td>
<td>Multi-point lock system</td>
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<tr>
<td>7</td>
<td>1¾&quot; panels with wide stiles and rails for a true French look</td>
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<td>8</td>
<td>4½&quot; jambs made of clear wood eliminate extensive drywall work</td>
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<td>Select clear wood ready for paint or stain to match any interior décor</td>
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<td>Energy-efficient Warm Edge insulating tempered HP glass helps reduce energy costs and fabric fading – optional HP, HP2, HP2+, HP2MAX, HP2MAX+, HP2MAX+SC, HP2MAX or HP3MAX+SC</td>
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<td>14</td>
<td>Vacuum-treated, solid wood components resist damage from water and fungus</td>
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<td>Durable .050 extruded aluminum cladding on exterior surfaces of frame and .080&quot; on panels resists dings and dents while providing structural integrity. Available with ADA compliant sill</td>
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**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. Available option.
### NFRC THERMAL PERFORMANCE DATA

#### DOUBLE HUNG

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### BI-PARTING & FRENCH SLIDING PATIO DOOR

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### 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.
### 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\(^{sc}\) (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\(^{sc}\)** — 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+\(^{sc}\)** — Dual-pane with one lite of solar cooling Low-E and one lite of Interior Surface Low-E
- **Low-E\(^{ps}\)** — Dual-Pane with one lite of Passive Solar Low-E
- **Low-E2+\(^{ps}\)** — Dual-Pane with one lite of Passive

### 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\(^{sc}\)** — 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+\(^{sc}\)** — One lite of solar cooling optimized Low-E and one lite of Interior Surface Low-E with argon gas fill
- **HP\(^{ps}\)** — One lite of passive solar Low-E glass (Surface 3) with argon gas fill
- **HP2+\(^{ps}\)** — One lite of passive solar Low-E and one lite of Interior Surface Low-E with argon gas fill
- **HP\(^{max}\)** — Triple-pane glass package with two lites of Low-E and an interior glass substrate with two chambers of argon gas fill
- **HP3\(^{max}\)** — 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

---

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

**WHAT IS LOW-E?**

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.
GLASS OPTIONS

- Low-E
- Low-E<sub>SC</sub>
- Low-E2+
- Low-E2+<sub>SC</sub>

- HP
- HP<sub>SC</sub>
- HP2+
- HP2+<sub>SC</sub>

- HP<sub>PS</sub>
- HP2+<sub>PS</sub>
- HP<sub>MAX</sub>
- HP<sub>MAX</sub><sub>SC</sub>

- HP<sub>3MAX</sub>
- HP<sub>3MAX</sub><sub>SC</sub>
- Tinted
- Obscure
- Black Spandrel
- Tempered*<br>
- Laminated (security)
- Sound Package (laminated)

* 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.

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 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

Colonial
Half Colonial (shown on Casement)
Plaza
Prairie
Perimeter Prairie

Diamond

GRILLE STYLES

5/8” Flat GBG  7/8” Flat GBG  5/8” Sculptured GBG  1” Contoured GBG  7/8” SDL  1 1/4” SDL  11/16” Full Surround Removable Grilles

GBG = Grilles-Between-the-Glass  SDL = Simulated-Divided-Light

Putty Glazed SDL Bar

Call customer service for optional grille patterns (800.999.8400)
Our standard colors are as durable as they are beautiful. Choose from eight eye-catching hues.

- WHITE
- SANDALWOOD
- TAUPE
- EVERGREEN
- IVORY
- COTTAGE RED
- BLACK
- DARK BRONZE

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

- Signature Collection

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

- Radiance Collection

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.

GET Custom Options

Colors shown may not be accurate representations. For color matching, please request color swatches from your Ply Gem sales representative.
Consult a Ply Gem sales representative about the details and your specific requirements.
WINDOW HARDWARE OPTIONS

White  Beige  Taupe  Bright Brass  Antique Brass  Satin Nickel  Oil Rubbed Bronze  Black

DOOR HARDWARE OPTIONS*

*French outswinging impact patio door handles feature PVD (coastal) finishes and are only available in traditional style, and in bright brass, satin nickel and oil-rubbed bronze.

HINGED PATIO DOORS

Traditional Bright Brass  Traditional Antique Brass  Traditional Satin Nickel  Traditional Oil Rubbed Bronze

CONTEMPORARY WHITE

Contemporary Brushed Chrome  Contemporary Satin Nickel  Contemporary Black

SLIDING PATIO DOORS

Antique Brass  Bright Brass  Oil Rubbed Bronze  Satin Nickel