

Vinyl Replacement Windows Quick Guide

Thermal Industries manufactures energy efficient, vinyl replacement windows that are custom-made for a precise fit in your home. Select from our wide variety of vinyl replacement window styles and models to lower your energy bills and increase your home's comfort and value. Click on a link below to learn more about our replacement window styles.



[Double Hung Windows](#)

- Double hung replacement windows feature movable sashes.
- Sashes tilt inward for easy cleaning.



[Horizontal Sliding Windows](#)

- On slider windows, the sashes glide horizontally.
- Sliding windows are available in 2 or 3-lite configurations
- 3-lite horizontal sliding windows having operable end vents.



[Bow Windows](#)

- Bow replacement windows consist of 3, 4 or 5 windows in a single frame.
- All of the windows are equal size and provide a circular arch appearance.



[Bay Windows](#)

- Bay vinyl replacement windows consist of three windows in a single frame.
- The center lite is always twice as wide as the sidelites.
- May consist of two operable casements or double hung windows.



[Garden Windows](#)

- Garden vinyl windows provide a sunlit spot for plants and flowers.
- Usually installed above kitchen sinks or in dining rooms.



[Picture Windows](#)

- Vinyl Picture windows, also called deadlites, have fixed sashes that do not open or close.



[Casement Windows](#)

- Casement replacement windows are hinged on the left or right.
- Sashes crank outward to a full 90-degree swing.



[Awning Windows](#)

- Awning windows are hinged at the top.
- Crank from the bottom of the sash to open outward.



[Basement Windows](#)

- Basement replacement windows, also called Hopper windows, open inward from the top.
- Typically installed in basement applications.

Series Double Hung Windows—Frame Features

- Solid Vinyl, Multi-Chambered Construction
500 Double Hung Windows will not chip, peel or rot; never requires scraping or painting.
- Parallel I-Beam Construction
Provides increased strength, durability and structural integrity.
- Fully-Welded Frame & Sashes
Provide added strength, longevity and enhanced thermal performance.
- Beaded Flat Jamb Design
Creates maximum daylight and egress (opening by means of which one goes out: emergency exit). Also enables easy tilting of the top sash of your 500 Series Double Hung Window.
- Dedicated Pocket Header—Prevents air infiltration and provides a clean interior appearance.
- Fully Fusion-welded and Weeped Sill—Provides excellent water resistance.
- Thermal Weight Management System with Draft Sentry
Provide years of smooth and easy double hung window sash operation.
- Beveled Screen Track—Enables easy screen removal.
- Half Screen
- White Color



500 Series Vinyl Double Hung Replacement Window.

500 Series Double Hung Windows — Sash Features

- Dual-Pane 13/16" Insulating Glass
Improved thermal performance.
- Intercept Warm-Edge Technology
Reduces condensation and seal failures and improves thermal performance.
- Q-Lock Compression Seals at Meeting Rail
Virtually eliminate air and water infiltration at the double hung window meeting rail.
- Double Wall "Easy-Grip" Vinyl Lift Rails
Full width rails assure easy double hung window sash operation.
- Finseal Woolpile Weather-Stripping
Virtually eliminates air and water infiltration.
- Round Housing Locks
Security and peace of mind.
- Rounded Safety Night Latches
Safely ventilate your home.
- Rounded External Tilt Latches
Provide easy access to double hung sash tilting feature.
- Locking Zinc Tilt Pins
Prevent accidental double hung window sash displacement during window cleaning.

500 Series Double Hung Windows — Options

- [Peak Performance™ Family of Glass Packages](#)
Select from Dual-Pane Insulating Glass Systems featuring LoE² Glass, enhanced with Argon Gas, and sealed with a Warm-Edge Technology Spacer System.
- Obscure and Tinted Glass
- Shaped Accent Windows in a Variety of Styles
- Earthtone Color
- [Maintenance-Free Grids](#) in a Variety of Styles
- Foam Frame Wrap
- Full Screen, Aluminum Screen
- [Invisi-Screen®](#)—Fiberglass screen that provides an enhanced outdoor view, more light transmittance, improved airflow, and increased insect protection.
- Nailing Fin for New Construction
Note: Some glass options may limit Energy Tax Credit eligibility.

Euroweld 510 Sliding Window Features

- **Solid Vinyl, Multi-Chambered Construction**
Will not chip, peel or rot; never requires scraping or painting
- **Fully-Welded Frame & Sashes**
Provide added strength, longevity and enhanced thermal performance
- **Dual-Pane 13/16" Insulating Glass**
Improved thermal performance
- **Intercept® Warm-Edge Technology**
Reduces condensation and seal failures
- **Accu-Track System with Dual Weather Loc Finseal Weather-Stripping**
Virtually eliminates air and water infiltration
- **Full Vinyl Interlock**
For security and elimination of air infiltration at meeting rail
- **Entry Guard Lock**
Security and peace of mind
- **Double Wall Slide Rails**
Full width rails assure easy sash operation
- **Exclusive Removable Vinyl Track Liners**
For easy cleaning
- **Monorail Track System**
Provides easy sash operation
- **Multiple Brass Roller Wheels**
Self-aligning to reduce friction and operating force when opening/closing sashes
- **Fiberglass Half Screen**
- **White Color**

Euroweld 510 Sliding Window Options

- **[Peak Performance™ Family of Glass Packages](#)**
Select from Dual or Triple-Pane Insulating Glass Systems for your sliding windows featuring LoE² Glass, enhanced with Argon or Krypton Gases and sealed with Warm-Edge Technology Spacer Systems.
- **Obscure and Tinted Glass**
- **[DreamGlas® Gallery Collection-Jewel Cut, Color and Camed Panels](#)**
- **Exclusive Circle Sash Grid Design**
- **Shaped Accent Windows**
- **[Earhtone Color](#)**
- **[Oak Natural Woodgrain](#)**
Paintable and stainable interior synthetic laminate
- **[White WoodGrain](#)** Interior with Earhtone Exterior Color.
Matching two-tone 5/8 inch or Contour Narrow Grids available.
- **Honey Oak or Caramel Oak [WoodGrain Finishes](#) with Color-Coordinated Mocha Hardware.**
NOTE: Honey Oak and Caramel Oak WoodGrain Finishes are available with your choice of White or Earhtone exterior colors. Not available with Safari Brown exterior color.
- **[Maintenance-Free Grids](#) in a Variety of Styles**
- **[Brushed Nickel or Brass Electroplated Metal Locks](#)**
- **External Night Latch**
- **Foam Frame Wrap on top and sides of frame**
- **Full Screen, Aluminum Screen**
- **[Invisi-Screen®](#)—Fiberglass screen that provides an enhanced outdoor view, more light transmittance, improved airflow, and increased insect protection.**



Euroweld 510 Sliding Window



510 Sliding Window in a kitchen application.

Casement Windows—Features

- Solid Vinyl, Multi-Chambered Construction
Our casement window will not chip, peel or rot; never requires scraping or painting
- Fusion-Welded Casement Window Frame & Sash
Provide maximum strength and energy efficiency.
- Weather-Tite Compression Seal on the Casement Window Frame
Virtually eliminates air and water infiltration.



Vinyl casement replacement windows with Natural Woodgrain Oak interior.

- Dual-Pane 13/16" Insulating Glass with Warm-Edge Technology
For enhanced thermal performance; reduces condensation and seal failures
- Multi-Point Locking System
Provides security and peace of mind.
- Corrosion Resistant Hardware
Protects the casement window's exterior parts from the corroding effects of weather and UV light.
- Unique Integral Mullion System
Enables you to create a wall of casement windows by connecting or "mulling" the windows together.
- Fiberglass Screen
- White Color

Casement Window—Options

- [Peak Performance™ Family of Glass Packages](#)
Select from Dual or Triple-Pane Insulating Glass Systems featuring LoE² glass, enhanced with Argon or Krypton Gases and sealed with Warm-Edge Technology Spacer Systems.
- Obscure or Tinted Glass
- [DreamGlas®](#); Jewel Cut, Color and Caming
- [Maintenance-Free Grids](#) In a Variety of Styles
- Exclusive Circle Sash™ Grid Designs
- Shaped Accent Windows in a Variety of Styles
- Earthtone and Vycap Safari Brown [Colors](#)
- Brushed Nickel or Brass Electroplated [Hardware](#)
NOTE: Brass and Brushed Nickel locks are not available on casement windows under 26" in height. Lock finish will be color of window vinyl.
- Nested Folding Operator Handle
- Dream® Wood Real Pine Wood Interior
- [Oak Natural WoodGrain](#); Paintable/Stainable Synthetic Laminate
- [White WoodGrain Interior](#) with Earthtone Exterior Color. Matching two-tone 5/8 inch or Contour Narrow Grids available.
- Honey Oak or Caramel Oak [WoodGrain Finishes](#) with Color-Coordinated Mocha Hardware.
NOTE: Honey Oak and Caramel Oak WoodGrain Finishes are available with your choice of White or Earthtone exterior colors. Not available with Safari Brown exterior color.
- Honey Oak or Caramel Oak WoodGrain Internal Grids in Flat or Contour Narrow Styles
- Aluminum Screen
- [Invisi-Screen®](#)—Fiberglass screen that provides an enhanced outdoor view, more light transmittance, improved airflow, and increased insect protection.
Note: Some glass options may limit Energy Tax Credit eligibility.



Three-section casement windows.



Bow Window with standing seam metal hip roof.

Custom-made Bay Windows and Bow Windows

Since all Thermal Industries vinyl bay windows and vinyl bow windows are custom-made for your home, you have a wide array of choices to enhance the appeal of your home. Thermal Industries bow windows and bay windows are available with casement windows, double hung windows, or fixed window vents. Select a roof style for your bay window or bow window that will accentuate the architecture of your home including custom shingled or metal, hip or shed style roofs.

Features for Bay Windows and Bow Windows

- Pine Colonial-Style Casing

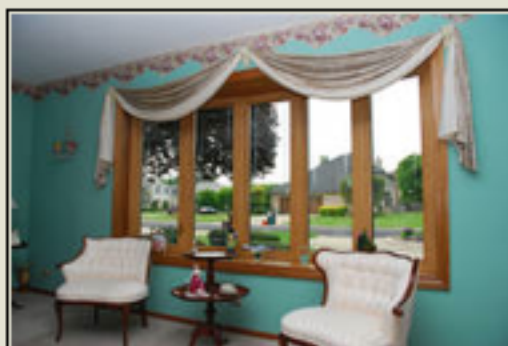
Enriches the warmth of your home's interior ambience. Oak Option also available for our bay and bow windows.

- Hand-Sanded 1-1/4-inch Birch Veneer Surround

Smooth, even surfaces enable you to capture your room's warm, even tones, using your choice of paint or stain. Oak option also available.

- Multi-Point Locking System on Casement Window Vents

Security and peace of mind translate into a safer home environment.



Replacement Bow Window

- Corrosion-Resistant Hardware

Protects exterior window parts on your bay window or bow window from the corroding effects of weather and UV light.

- One-Piece Design

Exclusive to the industry, Thermal Industries manufactures and assembles the entire bay window or bow window in our factory, assuring the highest quality standards are maintained.

- Over-The-Edge Design

No exposed exterior wood on any of our bay and bow windows.

Options for Bay Windows and Bow Windows

- [Peak Performance™ Family of Glass Packages](#)

Select from Dual or Triple-Pane Insulating Glass Systems featuring LoE² Glass, enhanced with Argon or Krypton Gases and sealed with Warm-Edge Technology Spacer Systems.

- [DreamGlas](#) Gallery Collection: Jewel Cut, Etched, Color & Camed Panels

- Casement Window or Double Hung Window Style Vents

- High-Grade 1-1/4" Oak Veneer Surround

- Custom Hip or Shed Roofs (Shingle or Metal)

- Dream® Wood Real Wood Pine Interior

- [Oak Natural WoodGrain](#) Paintable/Stainable Interior Synthetic Laminate

- [Honey Oak WoodGrain Finish](#) or [Caramel Oak WoodGrain Finish](#) with Color-Coordinated Mocha Hardware; Available on Casement Vents, select Double Hung Window Vents and select Picture Window Deadlite models.

- Honey Oak or Caramel Oak WoodGrain Internal Grids in Flat or Contour Narrow Styles



Bay Window with optional Caramel Oak Woodgrain Finish.



Caramel Oak Woodgrain Bay Window featuring the pre-finished option and nested folding operator handles in Mocha.

- **NEW!** Pre-Finished Bay and Bow Windows

Seat, sides and header wood is stained to match either the Honey Oak or Caramel Oak Bay and Bow Windows. 3 1/2-inch Oak Wood Casing is stained to custom match your window. All wood is then finished with Krystal®, a new generation non-yellowing, UV-resistant varnish system that offers the ultimate in durability against extreme moisture and household chemicals.

- Bay and Bow Cable Supports

- Bay and Bow Aluminum Knee Brace Supports

- Bay and Bow Wood Knee Brace Supports

- Earthtone or Vycap Safari Brown Exterior Colors

- Folding Operator Handle for Casement Window Vents

- Solid Oak Colonial Casing

- Sill Muffler for Increased Thermal Efficiency

- Box Bay or V-Bow Configurations

Note: Some glass options may limit Energy Tax Credit eligibility.

Krystal is a registered trademark of ML Campbell

Garden Windows, the perfect focal-point for your kitchen

Add elegance to any surrounding with a three dimensional vinyl garden window. Air and light fill the interior with casement window style side vents and angle glass skylight. Ideal for plant lovers, the garden window is perfect for kitchens and breakfast nooks to bring the outdoors inside.

290 Garden Windows — Features

- Solid Vinyl, Multi-Chambered Construction
290 Garden Windows will not chip, peel or rot; never requires scraping or painting.
- Fully-Welded Frame & Sashes
Provide added strength and enhanced thermal performance.
- Dual-Pane 13/16" Insulating Glass with Warm-Edge Technology
For enhanced thermal performance; reduces condensation and seal failures.
- Trapezoid-Shaped Casement Window Vents
- Sanded 1-1/4-inch Birch Veneer Surround
Smooth, even surfaces enable the 290 Garden Window to capture your room's warm, even tones, using your choice of paint or stain.
- Colonial Pine Casing
Enriches the warmth of your home's interior ambience.
- Multi-Point Locking System
Security and peace of mind translate into a safe home environment.
- Corrosion-Resistant Hardware
Protects exterior garden window parts from the corroding effects of weather and UV light.
- Wood Garden Window Knee Brace Supports
- Safety Laminated Glass Garden Window Roof
- Custom-Made Wall Thicknesses
- White Color

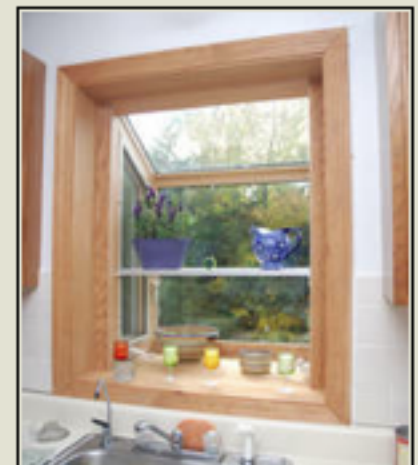
290 Garden Windows — Options

- [Peak Performance™ Family of Glass Packages](#)
Select from Dual or Triple-Pane Insulating Glass Systems (for the Garden Window's casement vents and front deadlite), featuring LoE² glass, enhanced with Argon or Krypton Gases and sealed with Warm-Edge Technology Spacer Systems.
- [DreamGlas®](#) Gallery Collection: Jewel Cut, Etched, Color & Camed Panels
- High-Grade Oak Veneer Surround
- Colonial Oak Casing
- [Maintenance-Free Grids](#) in a variety of styles
- [Oak Natural WoodGrain](#)-Paintable/Stainable Interior Synthetic Laminate
- [Earhtone Color](#)
- Folding Operator Handle
- Garden Window Shelf
- Sill Muffler for Added Insulation

Note: Some glass options may limit Energy Tax Credit eligibility.



Vinyl Garden Window 290



290 Garden Window with optional Oak Natural WoodGrain.

Legance Patio Door — Standard Features



Our patio doors feature Fully-Welded Construction



Monorail Track Design enables your patio door to glide smoothly when opening and closing.



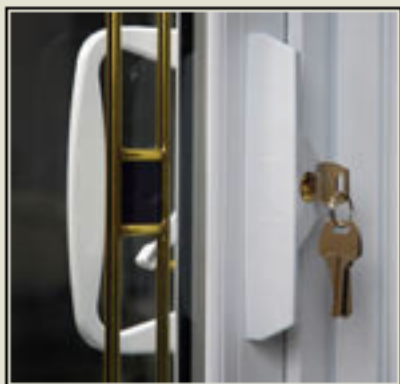
Our Patio Door's Grooved Aluminum Walking Plate provides an area to scrape off dirt and soil, keeping your home cleaner.



Sliding Glass Patio Door Screens feature Accu-Track Anti-Racking System.



The Legance Patio Door's Dual-Point Grappling Hook Lock increases the security of your patio door by drawing the sash tight to the frame.



Legance Patio Doors are standard with an External Key Lock.

- The Legance Patio Door's Recessed Security Bolt acts as an extra lock or allows for secure, partial ventilation.
- Legance Patio Doors feature 13/16" **Dual Pane Insulating Glass** with Warm-Edge Technology.
- The **Superior Wedging Interlock** on the Legance Patio Door increases security and reduces weather infiltration.
- **White color** is standard on all Legance Sliding Glass Doors.
- Legance Sliding Patio Doors are tested to the AAMA's strict standards.
- All Legance Patio Doors are NFRC tested.

Vinyl Colors

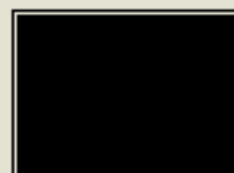
All Thermal Industries Vinyl Replacement Windows are available in White (standard) and optional Earthtone colors. Select window models are available in an optional Safari Brown color.



White



Earthtone

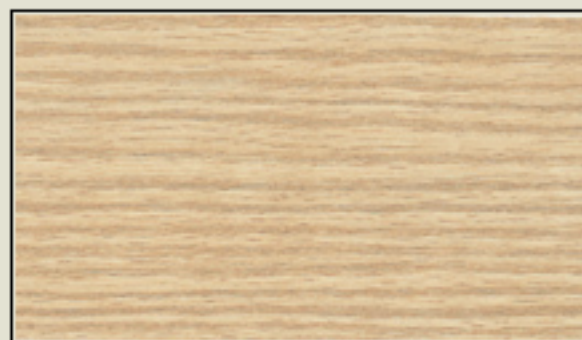


Safari Brown

Natural WoodGrain Paintable/Stainable Option

If you prefer the rich look and texture of natural wood, consider the Oak Natural WoodGrain option for your new vinyl replacement windows. Now you can benefit from thermal efficiency, low maintenance, and the added beauty of a wood look!

This synthetic wood grain laminate gives you complete flexibility: Paint to achieve the interior color of your choice, stain to match existing wood trim, or maintain its natural look by simply applying a protective coating.



Paintable and Stainable Oak Natural WoodGrain

WoodGrain Finishes

Honey Oak or Caramel Oak finishes feature a rich, woodgrain interior combined with our maintenance-free and energy efficient vinyl. Matching hardware and decorative internal grids in flat or contour shapes add the perfect finishing touch.



Honey Oak Finish



Caramel Oak Finish

NEW! White WoodGrain Interior with Earthtone Exterior Color. Matching two-tone 5/8 inch or Contour Narrow Grids are available.



White WoodGrain Interior
Earthtone Exterior Color

Window Hardware Finishes

Looking for the perfect finishing touch to your new vinyl replacement windows? Thermal Industries has beautiful and elegant hardware options that will add a touch of class to your new, energy efficient windows.

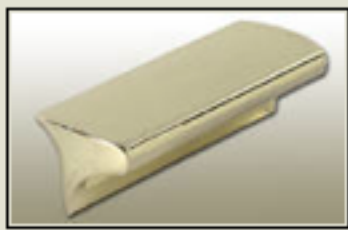
Double Hung & Slider Hardware Options:



Brass Lock *



Brushed Nickel Lock*



Brass Handle*



Brushed Nickel Handle*



White Metal Handle*



Earhtone Metal Handle*

Casement and Awning Hardware Options



Brass Operator & Lock Handle*



Brushed Nickel Operator & Lock Handle*

*Available on select models. Refer to individual model feature and options pages for availability.

Energy Tax Credits for Energy Efficient Windows



Energy efficient windows and doors will save you money on your heating and cooling bills...and now on your taxes, too!

Earn the [Energy Efficiency Tax Credit](#) when you purchase Thermal Industries windows or doors with a qualifying glass package from our Peak Performance™ Glass Family of dual and triple pane Low-E insulating glass units.**

How does Low-E Glass work?

Low-E glass is treated with a thin transparent coating of metal oxide and silver. As shown in the diagram at right, Low-E:

(1) Allows natural light to freely enter your home.

(2) During winter months, long-wave heat energy radiating from indoor objects is reflected back into the house keeping your home warm while lowering heating costs.

(3) In the summer, outdoor long wave heat energy, radiating from objects is reflected back outside, lowering cooling costs. It also reduces the penetration of ultra-violet rays to minimize fading of carpet and draperies.

Peak Performance™ Glass

The Peak Performance™ Glass package is a dual-pane insulating glass system constructed of one glass lite of high performance Low-E glass and one lite of clear glass.

The air space between the two lites of glass contains Argon gas. Argon is a colorless gas that is denser than air. It increases the insulating value of the glass unit as well as providing insulation from outside noise. Intercept® Warm-Edge Technology seals the glass unit.

Many of Thermal Industries' window and door products specified with Peak Performance Glass will qualify for the [Energy Tax Credit](#). Some restrictions may apply. Refer to product specific pages on this website, or consult your sales representative for more information.

Peak Performance™ LE Glass

The Peak Performance™ LE Glass package is a dual-pane insulating glass system constructed of two lites of high performance Low-E Glass.

The air space between the two lites of glass contains Argon gas. Argon is a colorless gas that is denser than air. It increases the insulating value of the glass unit as well as providing insulation from outside noise. Intercept® Warm-Edge Technology seals the glass unit.

Many of Thermal Industries' window and door products specified with Peak Performance LE Glass will qualify for the [Energy Tax Credit](#). Some restrictions may apply. Refer to product specific pages on this website, or consult your sales representative for more information.

Peak Performance Ultra Glass

Peak Performance™ Ultra is a triple-pane glass system constructed of two glass lites of high performance Low-E glass and one lite of clear glass.

The two air spaces between the panes of glass contain Argon gas. Argon is a colorless gas that is denser than air. It increases the insulating value of the glass unit as well as providing insulation from outside noise. Super Spacer® Warm-Edge Technology seals the glass unit.

ALL Thermal Industries' window and door products specified with Peak Performance Ultra Glass will qualify for the [Energy Tax Credit](#). Some restrictions may apply. Refer to product specific pages on this website, or consult your sales representative for more information.

Super Peak Performance Glass

Super Peak Performance™ glass is a triple-pane glass system constructed of two glass lites of high performance Low-E glass and one lite of clear glass.

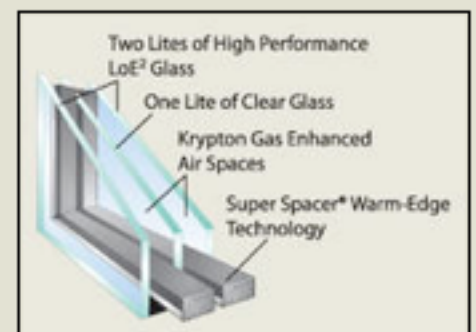
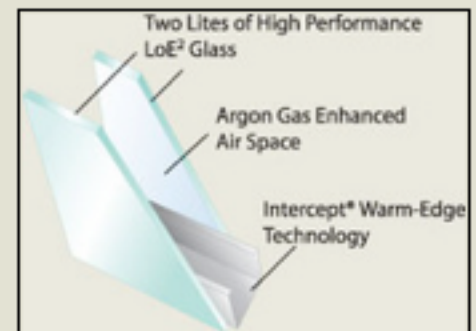
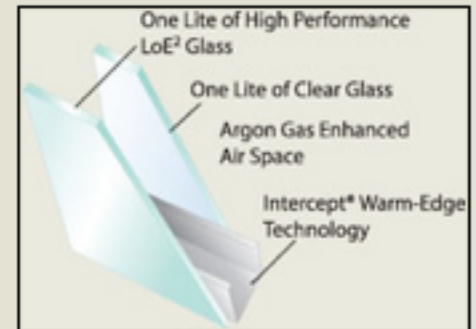
The two air spaces between the panes of glass contain Krypton gas. Krypton Gas increases the insulating value of the glass unit as well as providing insulation from outside noise.

Super Spacer® Warm-Edge Technology seals the glass unit.

ALL Thermal Industries' window and door products specified with Super Peak Performance Glass will qualify for the [Energy Tax Credit](#). Some restrictions may apply. Refer to product specific pages on this website, or consult your sales representative for more information.



Low-E Glass Demonstration



Gain a clearer view with Invisi-Screen

Enhancing your view of the outdoors is no longer a dream with the Invisi-Screen[®] option, a fiberglass screen that provides an enhanced outdoor view, more light transmittance, improved airflow, and increased insect protection over typical fiberglass screens.



Left: Standard Screen — Right: Invisi-Screen



Window with a Standard Screen on the left vent, and Invisi-Screen on the right vent.

Camed Glass Patterns

Camed glass patterns utilize a decorative piece of brass, zinc or lead, which is applied to both surfaces of the glass and divides it visually. *(Click images to enlarge for detail view)*



Sunshine Border



Gentle Blossom



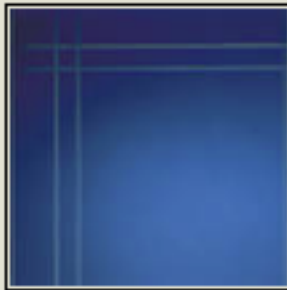
Soft Petals

Jewel Cut Glass Patterns

A V-shaped path, precisely cut into the glass surface. Jewel Cut is available polished or unpolished. The polished path is exposed to the inside surface of the window and refracts light into brilliant colors. Unpolished designs appear frosted or opaque and are on the inside pane between the glass.



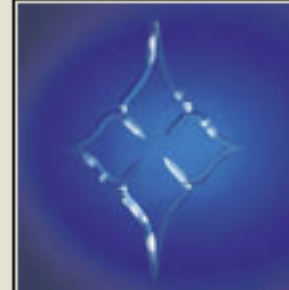
Camelot



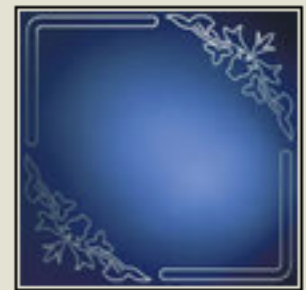
Double Prairie



Diamonds



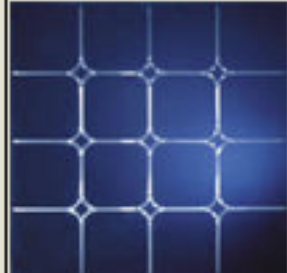
Florentine



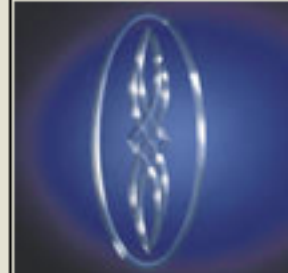
Floral Spray



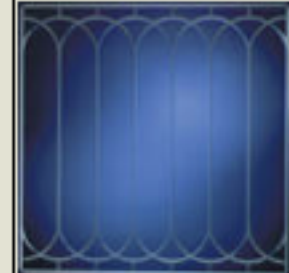
Free Spirit



Galaxy



Infinity



Jewel Cut Gothic



King Arthur



Lancelot



Single Prairie



Prism



Rosevine



Spring Flower

Frostline Cut Glass Patterns

A combination of an unpolished flat surface edge on both sides with Jewel Cut Grooves. Available in select designs. The Frostline Cut is located on the inside pane between the glass lites.

(Click top two images to enlarge for detail view)



Colonial



Prairie



Queens Arch



Starburst



Circle Sash



Colonial

Cut and Camed Glass Patterns

Feature brass or zinc coming inlaid on a wide Jewel Cut groove. Available in Prairie and Colonial Grids.

Available with color options and texture.

(Click images to enlarge for detail view)

Not available in tempered glass, or lead came, or in triple pane windows.



Crystal Arrows



Crystal Border



Crystal Cubes



Crystal Facets



Double Prairie