



ecotech
WINDOWS & DOORS

IMPERIAL
windows & patio doors

series im-2100

FOR REPLACEMENT
& NEW CONSTRUCTION
APPLICATIONS

IMPERIAL 2100 SERIES OF WINDOWS AND PATIO DOORS

NOT ALL VINYL IS THE SAME



Not all vinyl is the same. Many factors go into the quality of vinyl, that is why we use a proprietary extrusion. Only 100% u-PVC should be used in the formulation of a vinyl window the U denotes that the material is unplasticised polyvinyl chloride. Many lesser windows will use plasticizers in their compounds which are cheaper to use but soften the material which reduces the material's strength causing warping, bending, or failure in the future. Another key to vinyl formulation is the additive of light(UV) and weathering stabilizers.

Nobody wants a yellow window or one that will crack and become susceptible to the elements. To prevent this we use the optimal amount of the UV and weather stabilizer titanium dioxide. All our vinyl compounds must pass accelerated weather and UV tests before being certified market ready. Next is the addition of impact modifiers. Many companies forgo this step which reduces the durability of the vinyl and can even lead to weaker welding joints. Not all vinyl is the same, make sure you know the difference and insure your home's integrity.

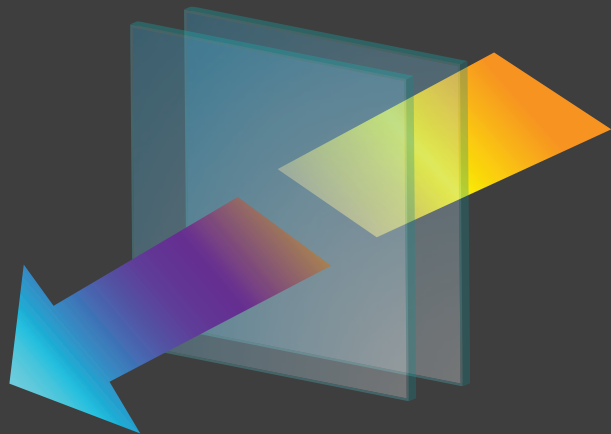
THERMAL CONTROL AND COST SAVINGS FOR YOUR HOME

When the temperature soars, ordinary glass just can't handle the heat. And tinted glass spoils the view. To solve this issue We have partnered with Cardinal Glass to use LoE³-3 6 6, which has been specially formulated to reject the sun's heat without affecting the view. Its proprietary triple silver coating lets more light while keeping more heat out, so your home stays cool and comfortable. With the insertion of Argon gas in between double pane glass combinations We offers the excellent efficiency in thermal control and cost savings for your home.

What's more, LoE³-3 6 6 provides exceptional fading protection as well. It blocks 95% of the sun's damaging ultraviolet rays (a leading cause of fading), so it will help your furniture, carpets, curtains and wood flooring stay beautiful for years to come.

REDUCED HEAT TRANSFERENCE

Dual pane construction features 1 layers of Cardinal LoE3 glass for UV rays blocking capability. UV ray protection, will prevent fading and sun damage of items inside your home.



IMPERIAL SLIDING WINDOWS SERIES IM-2101

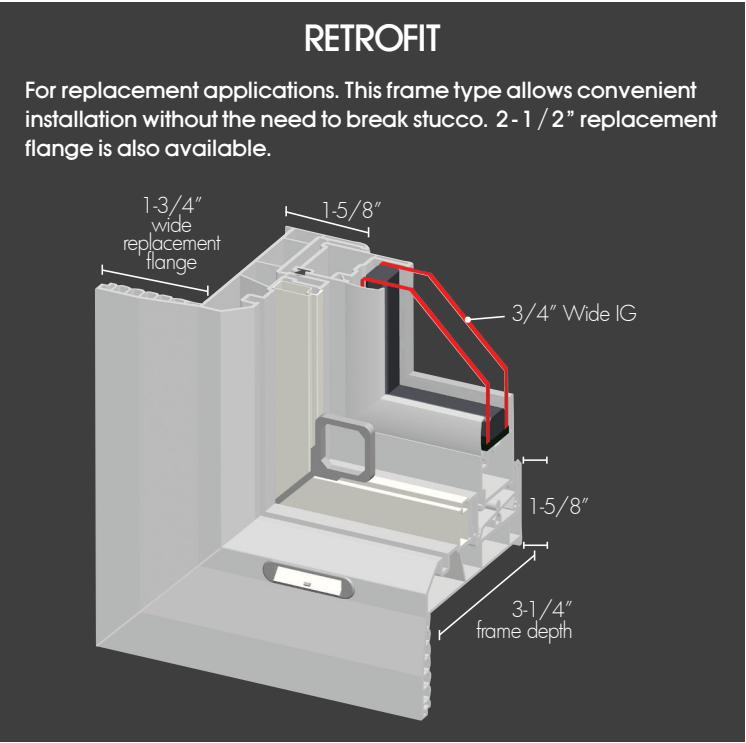
When something stands the test of time we call it a classic. Sliding windows have long been used in American homes for their ease of use and space saving nature. Imperial series sliders have improved on an American classic by reducing friction with a raised sliding rail, nylon roller housing and metal wheels. Our Monorail system insures that only the wheels touch the frame to eliminate resistance. While competition use plastic, we have integrated metal wheels to insure strength and prevent damage from debris that can collect on the track. Imperial sliders are engineered to provide a modern touch to an American classic.



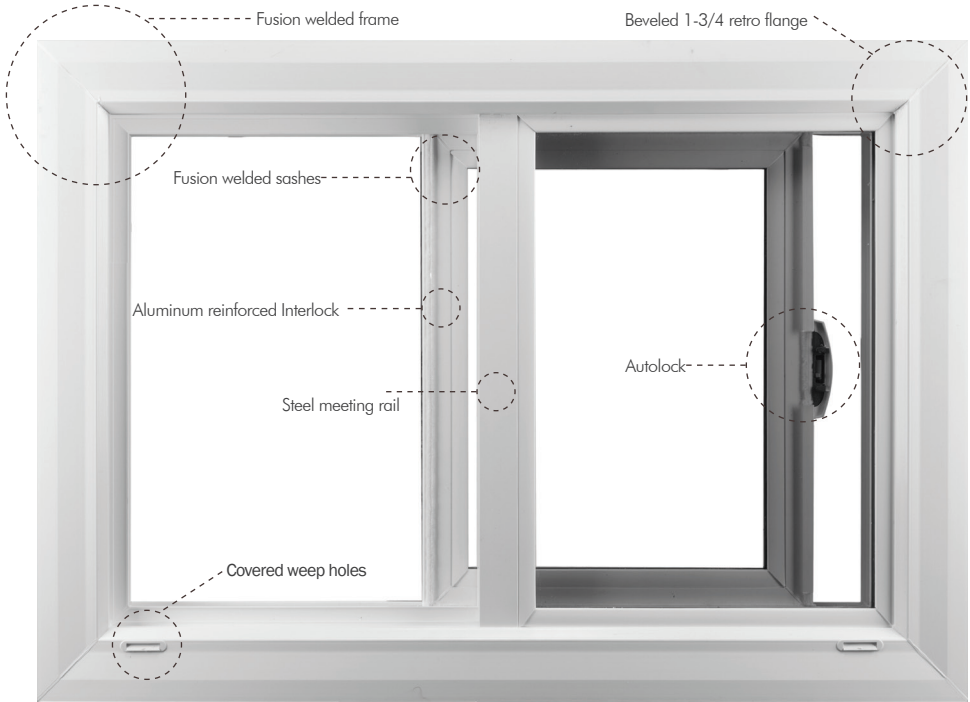
EXCEPTIONAL
CONSTRUCTION AND DESIGN

FRAME OPTIONS

- 1-3/4" standard and optional 2-1/2" replacement flange designed with heavy-duty dual wall
- 1" nailing fin set back in white or almond
- 1-3/8" nailing fin set back available in white



SLIDING WINDOWS FEATURES & BENEFITS



Imperial XO window, outside view

- Easy operation
Dual metal rollers are durable and help insure smooth openings and closings.
- A tight seal
Multiple weather-strips give you protection against air infiltration
- Simple to clean
Sliding sash can be removed to clean exterior glass from inside your home
- Design
Multiple grid styles and configurations are possible for whatever your application
- Security
Auto locks insure that every time you close the window your home is sealed, giving you security and peace of mind
- Structural Integrity
The mechanically fastened joints of aluminum frames may admit air and water. Fusion-welded uPVC joints create an impervious seal.
- Maintenance
Unlike aluminum and wood, uPVC is virtually maintenance free. It never needs paint, and requires only an occasional wash and wipe to clean.



Auto-lock by Interlock ASAA ABLOY

- Imperial Windows feature the original European inspired automatic sash lock by Interlock ASAA ABLOY, specialists in innovative hardware solutions for the window and door industry around the world.
- Matching the vinyl color with a removable cover
 - Features robust dual hooks for superior forced entry resistance
 - Effortless long lasting performance
-

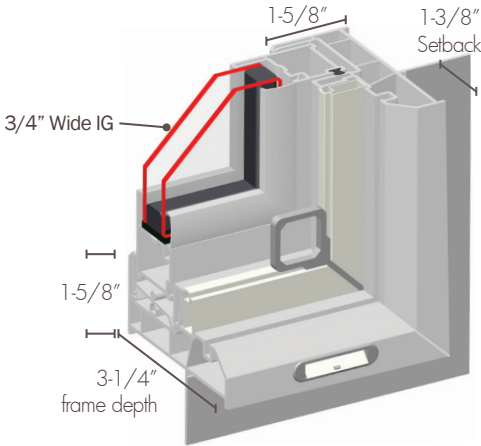
Window Rollers

Imperial sliding windows feature high quality steel tandem rollers in a nylon housing, for smooth gliding operation even at the largest sizes. Our monorail system insures that only the wheels touch the frame to eliminate resistance. These rollers can be adjusted to for effortless operation of window sash.



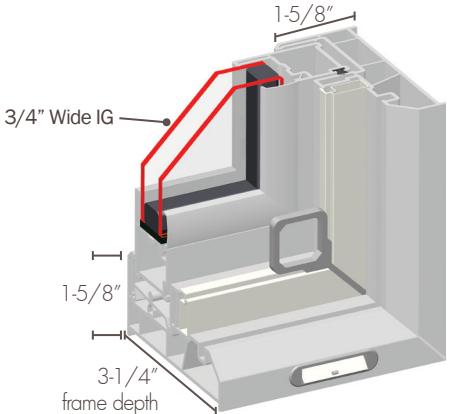
NAIL-ON

Nail-on frame allows for targeted installation in new construction applications and is available in 1" and 1-3/8" setback. 1-3/8" is only available in white.



BLOCK

Block frame is suitable for some replacement and new construction applications.



Energy Efficiency

The superior insulating properties of vinyl designed with heat reducing Multi-chambered profiles and Cardinal 3 6 6 glass Reduce Heat transfer up to 3 x that of standard single pane windows.

THERMAL, STRUCTURAL, & SOUND PERFORMANCE

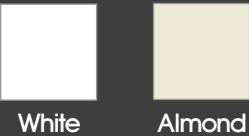
| Imperial Horizontal Sliding Windows XO | | | Thermal Performance | | | | | Structural Performance | Sound Transmission Class |
|--|-----------|------------|---------------------|----------|------|-----|-------------------------------|--|---|
| Glazing | | | Grids | U Factor | SHGC | VT | CR Condensation Resistance | | |
| Dual | 2 mm loE3 | 2 mm Clear | None | 0.28 | .32 | .53 | CR 62 | Class LC PG-30 Size tested 71 x 70" | STC 31 3/4" IG [1/8" annealed exterior, 7/16" Argon, 3/16" annealed interior] |
| | | | 3/4 - 5/8" | | .29 | .47 | | | |
| | | | >1" | | .26 | .42 | | | |

As tested with loE3 glass, Duralite Spacer and Argon gas filled combined with clear glass.

Options

- Standard and custom sizes
- Factory stacking and mulling options in many different combinations
- AAMA and NFRC certified to meet or exceed industry structural and energy efficiency standards
- May be ordered to meet ENERGYSTAR® requirements
- Lifetime Warranty (Does not include glass breakage)

Standard colors

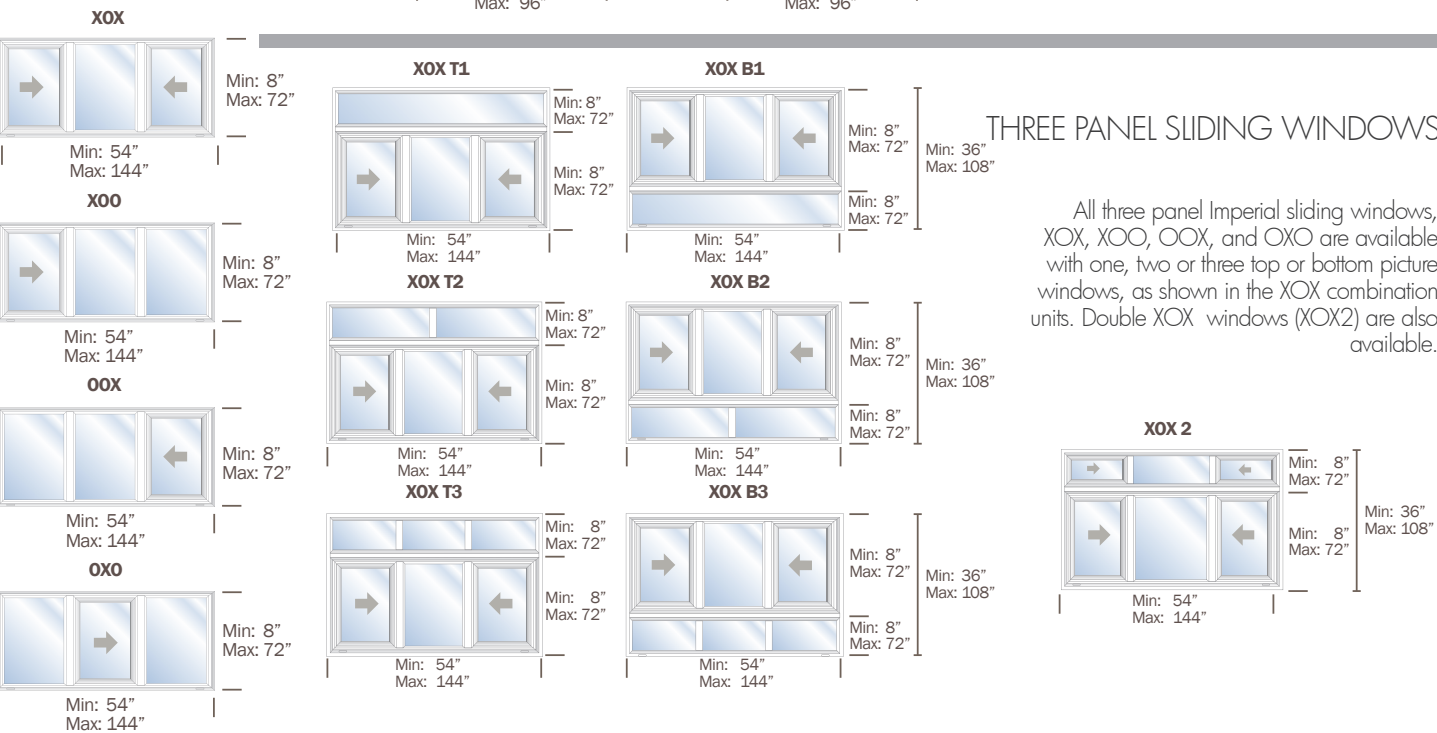


White

Almond

TWO PANEL
SLIDING WINDOWS

Both XO and OX sliding windows with one or two top or bottom picture windows and double XO or OX windows are available.



THREE PANEL SLIDING WINDOWS

All three panel Imperial sliding windows, XOX, XOO, OOX, and OXO are available with one, two or three top or bottom picture windows, as shown in the XOX combination units. Double XOX windows (XOX2) are also available.

FOUR PANEL SLIDING WINDOWS

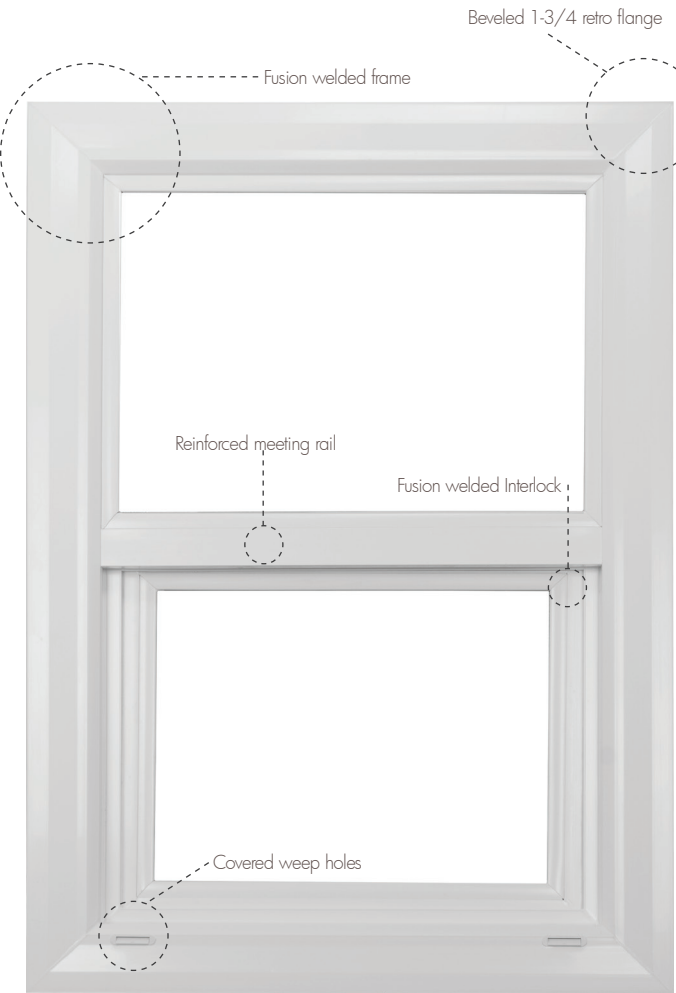
Four panel sliding windows OXXO are available with one, two or three pictures windows on top or bottom. Double OXXO windows are also available.



IMPERIAL
SINGLE HUNG
WINDOWS
SERIES IM-2102

With all the extra glass used for energy efficiency the sound of a window sticking trying to open up or slamming shut by itself are all too common. While many windows still use century old technology where a string is attached to counterweights to open the window, Ecotech has worked with engineers to come up with a modern fix.

Our constant force counterbalance allows you to open your window as far or as little as you like without the fear of the window crashing down. No more worrying about your window hanging on by a thread, update your home with technology for the 21st century.



SINGLE WINDOWS FEATURES & BENEFITS

Easy operation
Constant force counter weight balance system for smooth effortless operation.

A tight seal
Multiple weather-strips give you protection against air infiltration

Simple to clean
Operating sash can be removed to clean exterior glass from inside your home

Design
Multiple grid styles and configurations are possible for whatever your application

Security
Auto locks insure that every time you close the window your home is sealed, giving you security and peace of mind

Structural Integrity
The mechanically fastened joints of aluminum frames may admit air and water. Fusion-welded uPVC joints create an impervious seal.

Maintenance
Unlike aluminum and wood, uPVC is virtually maintenance free. It never needs paint, and requires only an occasional wash and wipe to clean.

Weatherability
Metals can corrode from exposure to weather and pollution. uPVC is naturally resistant to moisture and atmospheric pollutions such as acids, alkalis and salt air making it the prefect material to stand the test of time.

Energy Efficiency
The superior insulating properties of vinyl designed with heat reducing Multi- chambered profiles and Cardinal 366 glass Reduce Heat transfer up to 3 x that of standard single pane windows.

Weatherability
Metals can corrode from exposure to weather and pollution. uPVC is naturally resistant to moisture and atmospheric pollutions such as acids, alkalis and salt air making it the prefect material to stand the test of time.

Energy Efficiency
The superior insulating properties of vinyl designed with heat reducing Multi- chambered profiles and Cardinal 366 glass Reduce Heat transfer up to 3 x that of standard single pane windows.

THERMAL, STRUCTURAL, & SOUND PERFORMANCE

| Imperial Single Hung Windows SH | | | Thermal Performance | | | | | Structural Performance | Sound Transmission Class |
|---------------------------------------|--------------|---------------|--------------------------|-------------|------|-----|----------------------------------|---|---|
| Glazing | | | Grids | U Factor | SHGC | VT | CR Condensation Resistance | | |
| Dual | 2 mm LoE3 | 2 mm Clear | None | 0.28 | .32 | .53 | CR 62 | Class LC PG-30 Size tested 46 x 82" | STC 31 3/4" IG [1/8" annealed exterior, 7/16" Argon, 3/16" annealed interior] |
| | | | 3/4 - 5/8" | | .29 | .47 | | | |
| | | | >1" | | .26 | .42 | | | |
| | | | Size tested 47-1/4 x 59" | | | | | | |

As tested with LoE3 glass, Duralite Spacer and Argon gas filled combined with clear glass.

- Options**
- Standard and custom sizes
 - Factory stacking and mulling options in many different combinations
 - AAMA and NFRC certified to meet or exceed industry structural and energy efficiency standards
 - May be ordered to meet ENERGYSTAR® requirements
 - Lifetime Warranty (Does not include glass breakage)

Standard colors



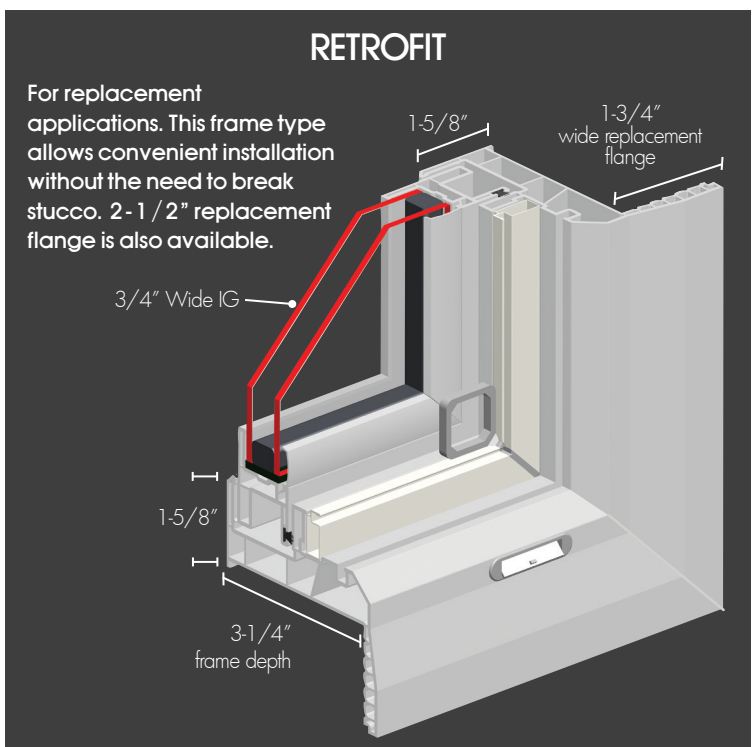
White



Almond

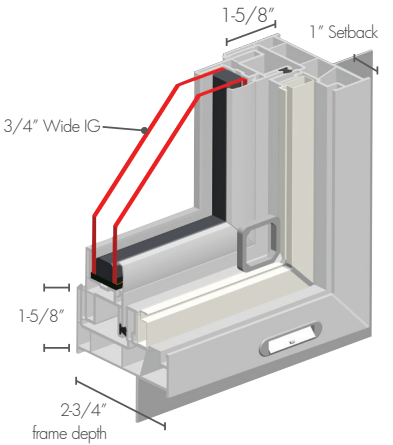
FRAME OPTIONS

- 1-3/4" standard and optional 2-1/2" replacement flange designed with heavy-duty dual wall
- 1" nailing fin set back in white or almond
- 1-3/8" nailing fin set back available in white



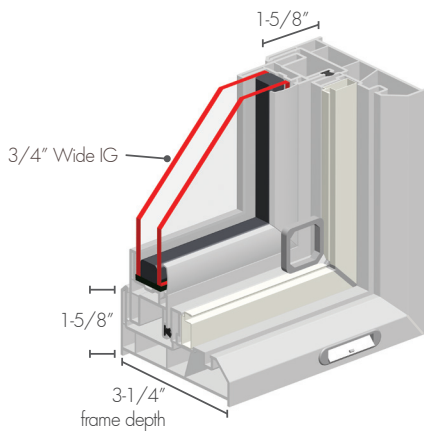
NAIL-ON

Nail-on frame allows for targeted installation in new construction applications and is available in 1" and 1-3/8" setback. 1-3/8" is only available in white.

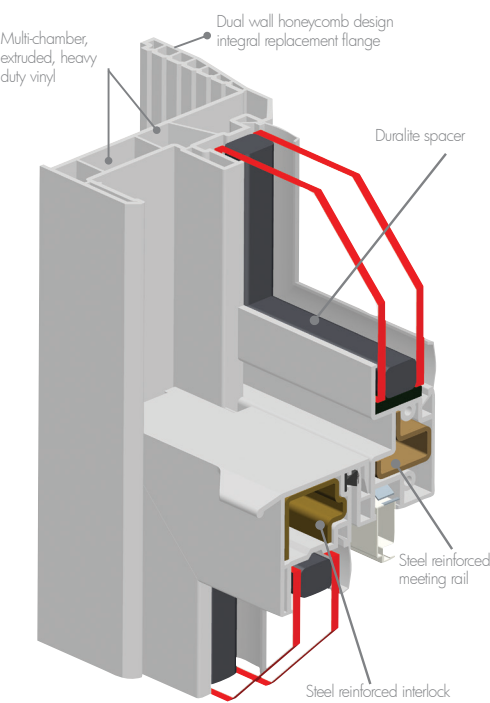


BLOCK

Block frame is suitable for some replacement and new construction applications.



EXCEPTIONAL CONSTRUCTION AND DESIGN



Auto-lock by Interlock ASAA ABLOY

- Imperial Windows feature the original European inspired automatic sash lock by Interlock ASAA ABLOY, specialists in innovative hardware solutions for the window and door industry around the world.
- Matching the vinyl color with a removable cover
 - Features robust dual hooks for superior forced entry resistance
 - Effortless long lasting performance



Constant Force Coil Balance System

The ability to vertically move the sash in our single hung windows rests in a constant force balance system operated by interlocking 1/2" stainless steel coil springs in natural color housings, which allows the closing force to be constant on any position of the sash.

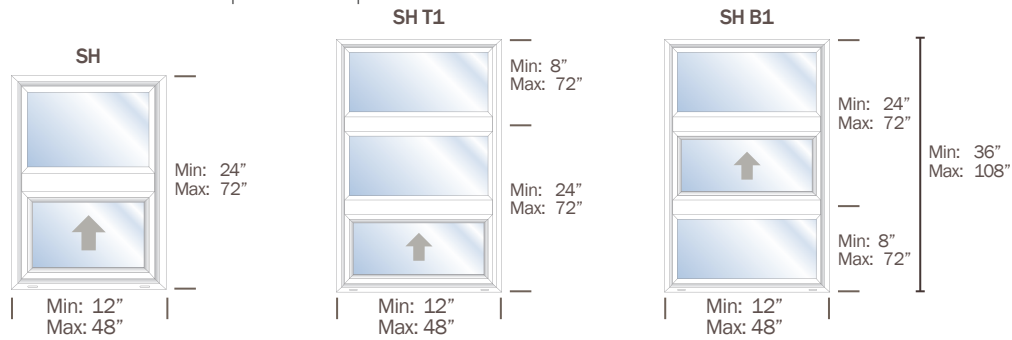
Different length units are used based on the height of the window and may have up to four coils which allow for effortless operation of moving sash.



Coils in casing

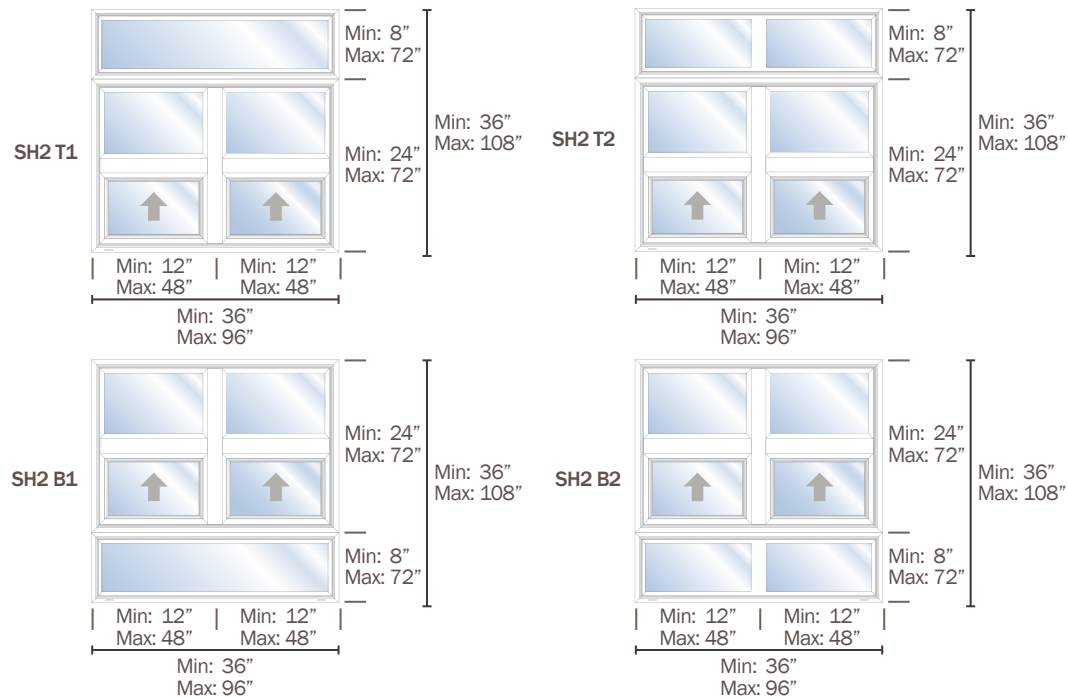
SINGLE HUNG WINDOWS STYLING

SH windows are available with one or two top or bottom picture windows.



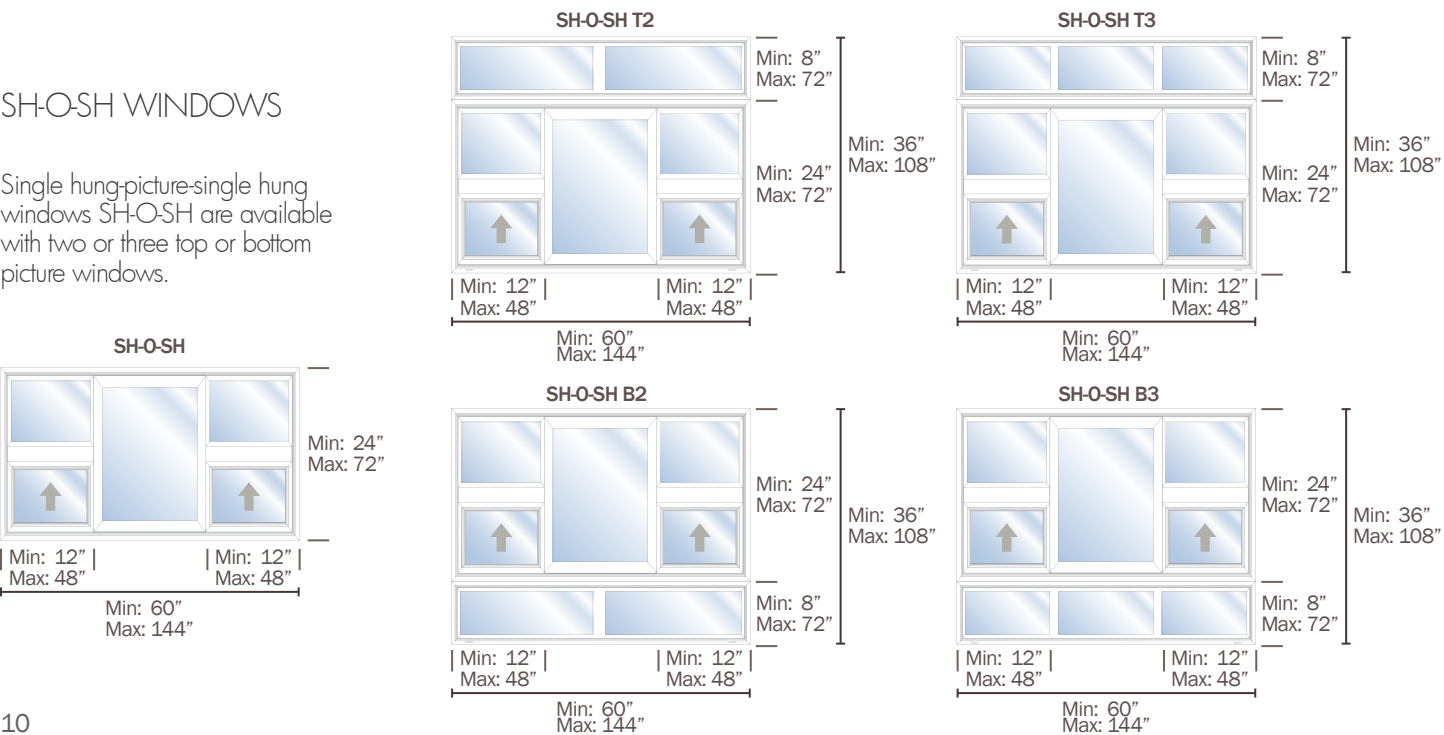
DOUBLE SINGLE HUNG WINDOWS

Double SH windows are available with one or two top or bottom picture windows.



SH-O-SH WINDOWS

Single hung-picture-single hung windows SH-O-SH are available with two or three top or bottom picture windows.



IMPERIAL
PICTURE WINDOWS
SERIES IM-2106

Picture windows are a simple and elegant touch to any room. Placed right they are a frame to the world outside. Our Imperial Series Picture Windows are designed to offer unobstructed views and maximum light exposure. The minimized frame offers maximum glass area allowing light to flood the room while significantly reducing heat transfer using Cardinal 3 6 6 glass. Use of a non-metallic Duralite spacer to separate glass panes also allows Ecotech to offer lower heat transfer than the competition. So, enjoy the view, light up your room all while keeping your home cooler and energy efficient.

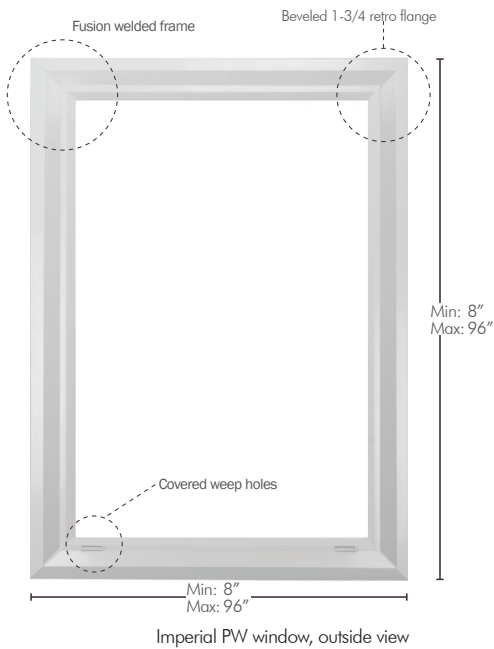
PICTURE WINDOWS FEATURES & BENEFITS

Design
Multiple grid styles and configurations are possible for whatever your application

Structural Integrity
The mechanically fastened joints of aluminum frames may admit air and water. Fusion-welded uPVC joints create an impervious seal.

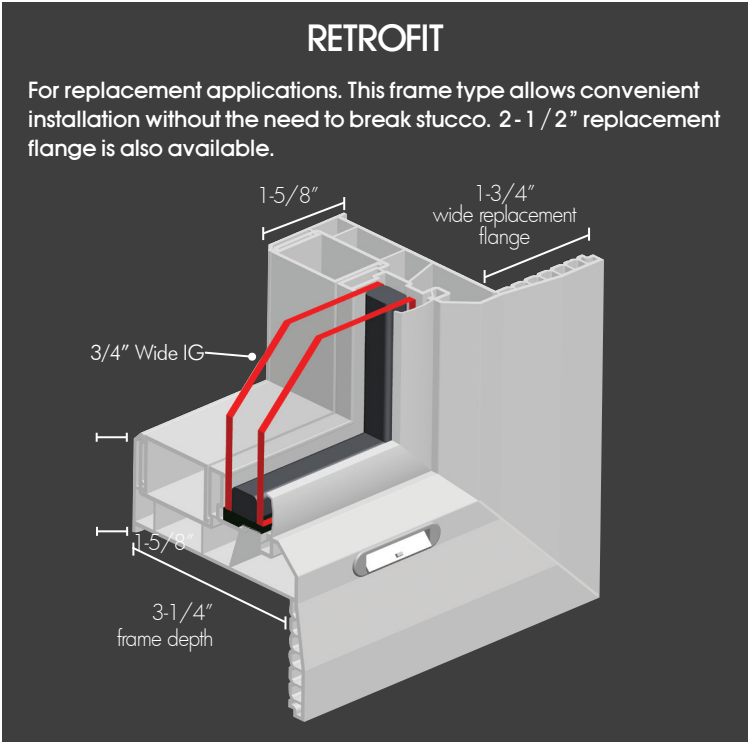
Maintenance
Unlike aluminum and wood, uPVC is virtually maintenance free. It never needs paint, and requires only an occasional wash and wipe to clean.

Weatherability
Metals can corrode from exposure to weather and pollution. uPVC is naturally resistant to moisture and atmospheric pollutions such as acids, alkalis and salt air making it the prefect material to stand the test of time.



FRAME OPTIONS

- 1-3/4" standard and optional 2-1/2" replacement flange designed with heavy-duty dual wall
- 1" nailing fin set back in white or almond
- 1-3/8" nailing fin set back available in white



SPECIALTY IMPERIAL
WINDOWS:
GEOMETRIC SHAPES &
COMBINATION UNITS



Energy Efficiency
The superior insulating properties of vinyl designed with heat reducing Multi- chambered profiles and Cardinal 3 6 6 glass Reduce Heat transfer up to 3 x that of standard single pane windows.

THERMAL, STRUCTURAL, & SOUND PERFORMANCE

| Imperial Picture Windows PW | | | Thermal Performance | | | | | Structural Performance | Sound Transmission Class | | |
|--------------------------------|--------------|---------------|--------------------------|-------------|------|-----|---------------------------------------|---|------------------------------|----------------|-------------------------------|
| Glazing | | | Grids | U Factor | SHGC | VT | CR Conden- sation Resistance | | | | |
| Dual | 2 mm LoE3 | 2 mm Clear | None | 0.25 | .35 | .58 | CR 63 | Class R PG-15 Size tested 72 x 60" | STC 29 3/4" IG | | |
| | | | 3/4-5/8" | | .32 | .51 | | | 1/8" annealed exterior | 7/16" Argon | 3/16" annealed interior |
| | | | > 1" | | .29 | .46 | | | | | |
| | | | Size tested 47-1/4 x 59" | | | | | | | | |

As tested with LoE3 glass, Duralite Spacer and Argon gas filled combined with clear glass.

Options

- Standard and custom sizes
- Geometric shapes
- Factory stacking and mulling options in many different combinations
- AAMA and NFRC certified to meet or exceed industry structural and energy efficiency standards
- May be ordered to meet ENERGYSTAR® requirements
- Lifetime Warranty (Does not include glass breakage)

Standard
colors



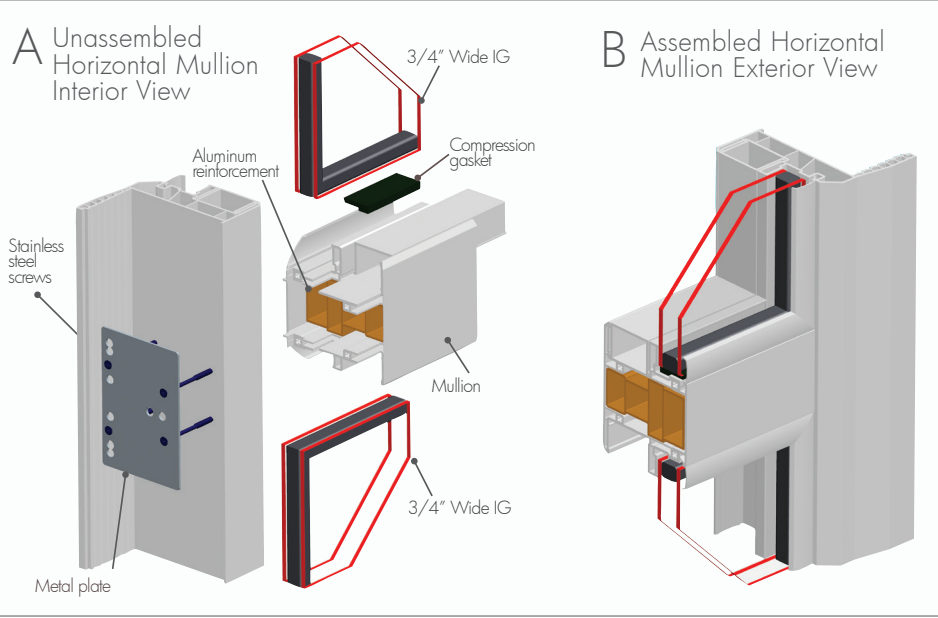
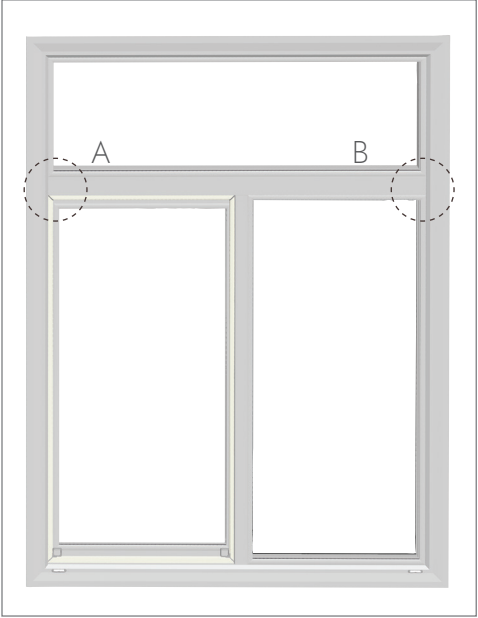
White

Almond

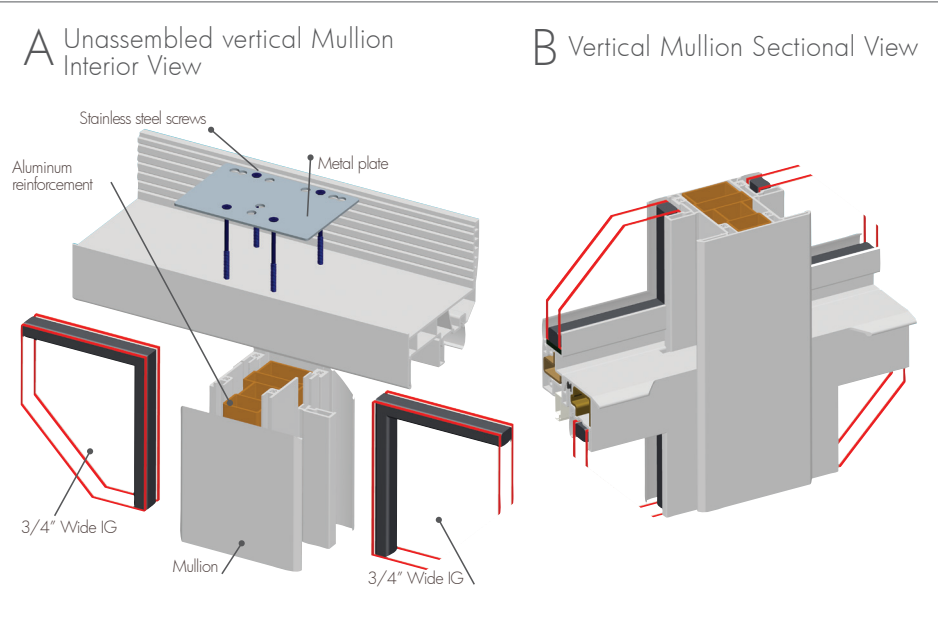
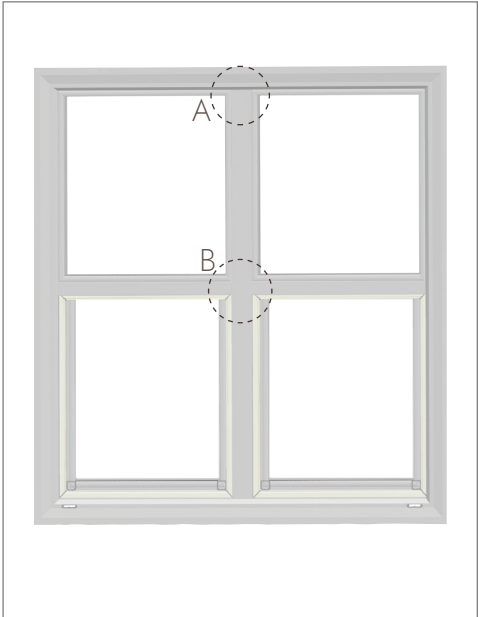
IMPERIAL SERIES
COMBINATION UNIT WINDOWS

Our modular system allows different window types to be combined together through the use of a mullion. The mullion separates the two window types. Structural integrity is improved by allowing multiple window types to be combined and installed as one unit rather than installing multiple windows in one opening. The benefits of this system include reduced installation costs, more glass area, and improved weatherability. All mullions are attached with stainless steel screws through a metal plate into the vinyl frame and continuing into the steel reinforcement that is inside every mullion. Mullions can be applied horizontally or vertically allowing for many configurations.

XO T 1 SLIDING WINDOW WITH ONE PICTURE ON TOP



SH 2 DOUBLE SINGLE HUNG WINDOWS





Sliding Patio Door features at a glance, outside view

- O1

Fusion welded frame and panels
- O2

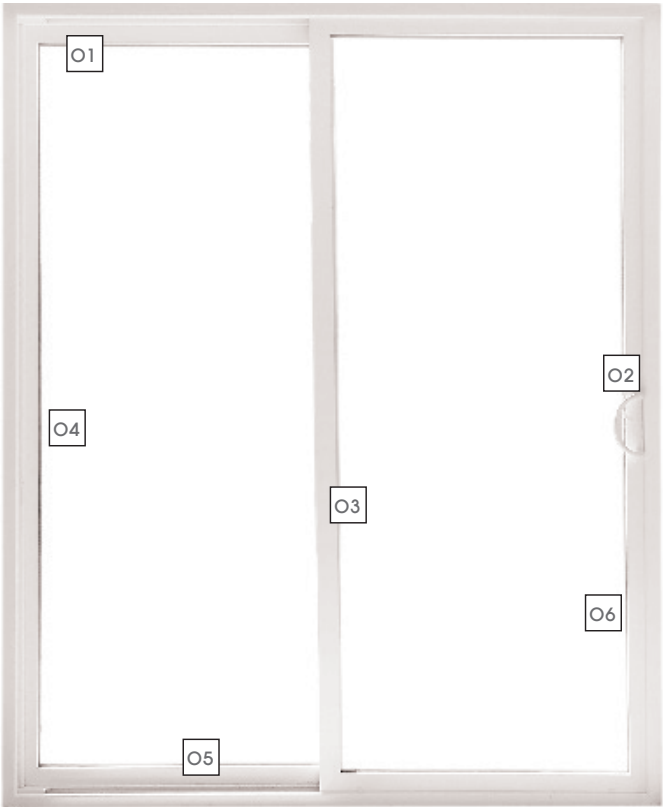
Ergonomically designed handle
- O3

Firmly secured and reinforced interlock
- O4

Heavy duty extruded vinyl in frame and panel members
- O5

2-1/4" wide rail and stiles
- O6

Double weather-stripping



Imperial XO Sliding Patio Door inside view

KEY FEATURES

- Multi-chambered heavy duty extruded vinyl for structural strength and durability
 - Frame depth is 5-5/8"
 - Fusion welded corners for strength and stability
 - 1" IG unit featuring Duralite spacer with warm edge technology for energy efficiency
 - Door panels feature a multi-channel extrusion for increased energy performance and strength
 - Steel and aluminum reinforcement for exceptional structural integrity
- Heavy duty aluminum rail system offers smooth operation
 - Steel galvanized adjustable rollers with steel housing for added durability
 - Ergonomic handle with dual point locking system for ease of use and tight seal against elements infiltration
 - 1" and 1-3/8" nailing fin set back for targeted installation
 - 2-1/2" replacement flange designed with heavy-duty dual wall
 - Argon gas filled chamber for increased energy savings

IMPERIAL SLIDING PATIO DOORS SERIES IM-2121

Imperial Series Sliding Patio Doors are crafted for smooth operation and a slim design. Imperial doors have a slim line sash and frame to maximize viewing area and light exposure. Imperial doors are reinforced with steel throughout to provide support and security.

Our wheel base is supported by the steel core to prevent the weight of the sash from pushing the wheels into the vinyl which is a common issue with competitors non-reinforced wheels. A proprietary aluminum triangle monorail lifts the sash off the track to minimize friction, while our high strength steel (or optional stainless steel) rollers glide across the rail. Heavy duty 2" wheels with bearings can hold 125 LBS each and with at least 8 per door they effortlessly slide the sash over the track. Our concave wheel design insures there is no slipping from the track like other companies flat or rounded wheel bases, making for a smooth, maintenance free ride every time.

Energy Efficiency

The superior insulating properties of vinyl designed with heat reducing Multi-chambered profiles and Cardinal 366 glass Reduce Heat transfer up to 3x that of standard single pane windows.

THERMAL, STRUCTURAL, & SOUND PERFORMANCE

| Imperial Sliding Patio Door PD | | | Thermal Performance* | | | | | Structural Performance | Sound Transmission Class |
|-----------------------------------|--------------|---------------|--------------------------|-------------|------|-----|--|--|---|
| Glazing | | | Grids | U Factor | SHGC | VT | CR <small>Condensation Resistance</small> | | |
| Dual | 3 mm LoE3 | 3 mm Clear | None | 0.29 | .22 | .52 | CR 61 | Class R-PG15 Size tested 96 x 96" | STC 31 1-1/16" IG [1/8" Tempered exterior, 3/4" air space, 3/16" Tempered interior] |
| | | | 3/4 -5/8" | | .20 | .46 | | | |
| | | | >1" | | .18 | .40 | | | |
| | | | Size tested 47-1/4 x 59" | | | | | | |

As tested with LoE3 glass, Duralite Spacer and Argon gas filled combined with clear glass.

Options

- Standard and custom sizes
- AAMA and NFRC certified to meet or exceed industry structural and energy efficiency standards
- May be ordered to meet ENERGYSTAR® requirements
- Lifetime Warranty (Does not include glass breakage)

Standard
colors



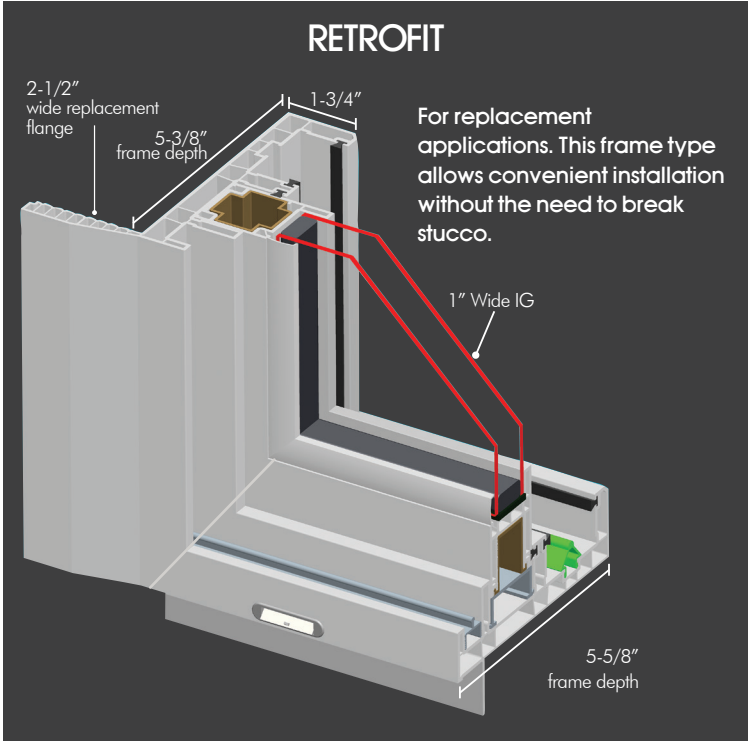
White



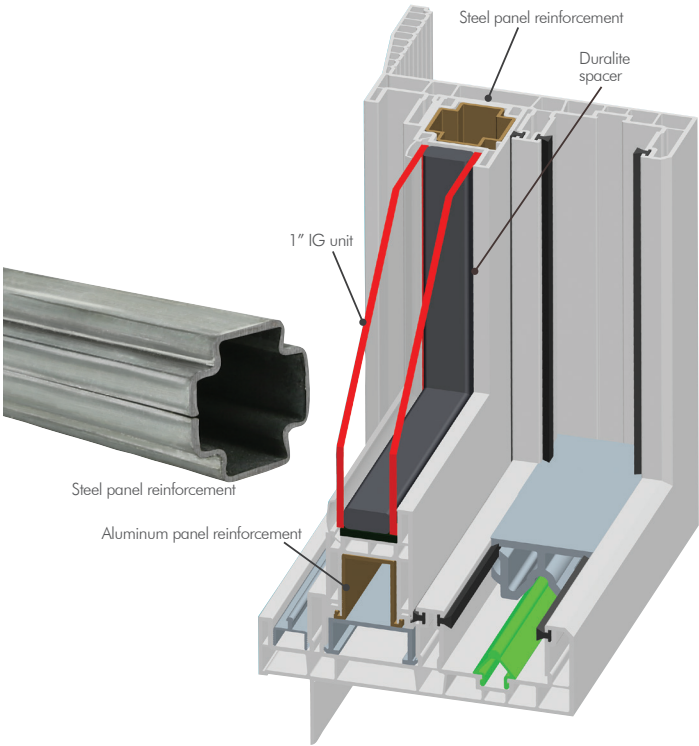
Almond

FRAME OPTIONS

- 2-1/2" replacement flange designed with heavy-duty dual wall
- 1" nailing fin set back in white or almond
- 1-3/8" nailing fin set back available in white



Reinforced Panels for Structural Integrity



CAREFULLY SELECTED HIGH-PERFORMANCE HARDWARE & PARTS

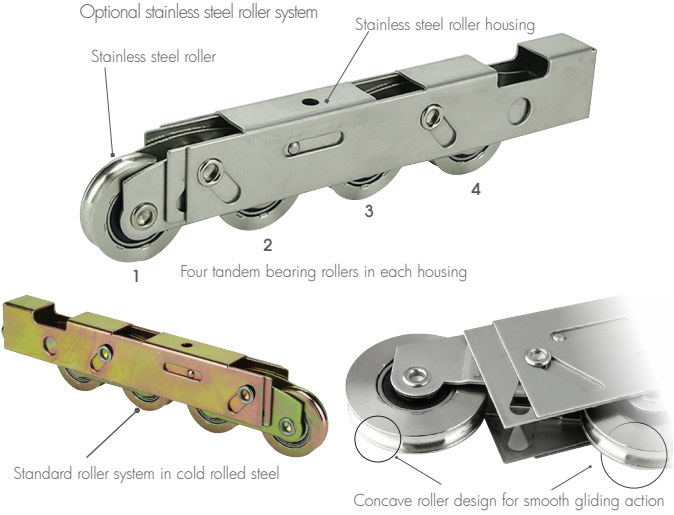
FOUR WHEEL TANDEM ROLLER SYSTEM

Imperial Patio Doors feature four-wheel tandem roller system in cold rolled steel housing and rollers, which provide long lasting smooth operation.

An optional commercial grade rolling system with casing and wheels in stainless steel is available upon request and is designed to effortlessly carry the our heavies door panels.

Optional Stainless Steel Roller Features

- Stainless steel housing
- Four strong tandem stainless steel concave rollers for quiet and durable rolling action
- Rollers slide on a heavy duty stainless steel track glider for smooth and soundless operation
- Each roller can hold up to 125 lbs for a total of 1000 lbs per door panel which delivers outstanding performance in large doors featuring the heaviest glass packages
- Rollers can be adjusted for smooth moving action

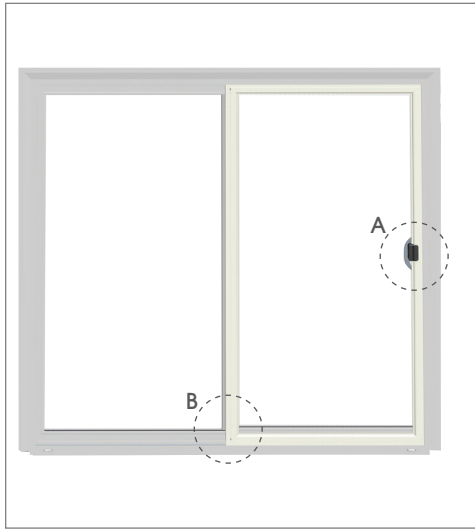


Dual latch lock

Imperial sliding doors feature a new dual latch lock which provides extra security and a tight weather seal. New ergonomic handle closes easily in a single motion.

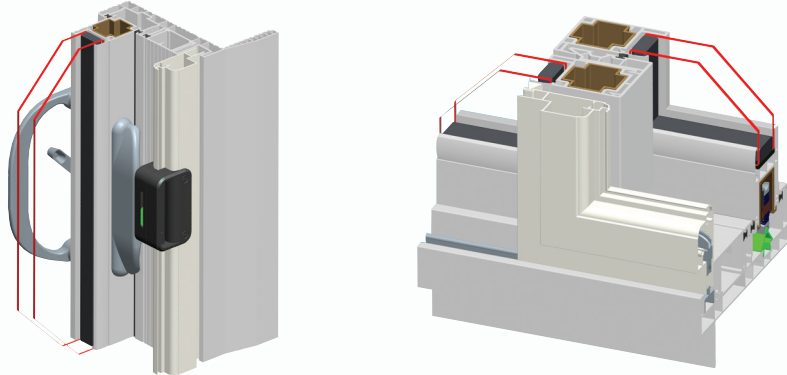


XO SLIDING PATIO DOOR

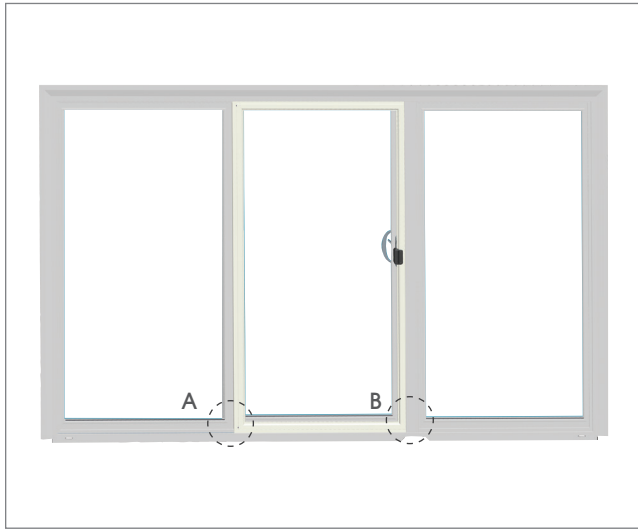


A Steel reinforced sash and lock. Low profile aluminum screen.

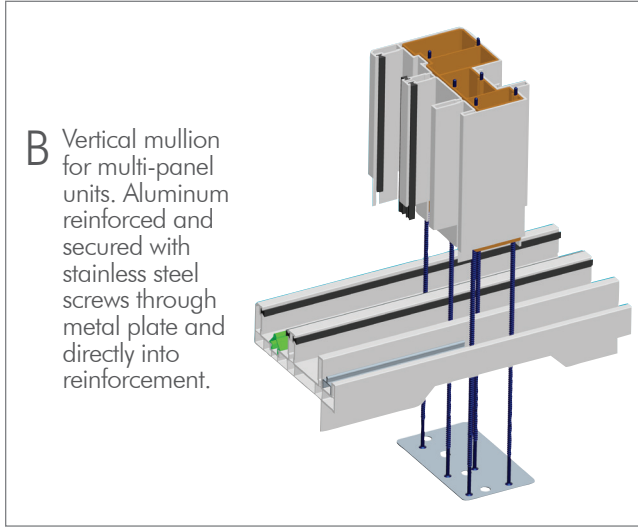
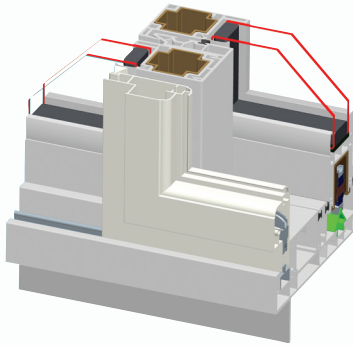
B Vertical sash cross section. Overlapping design maximizes glass and produces even sightlines.



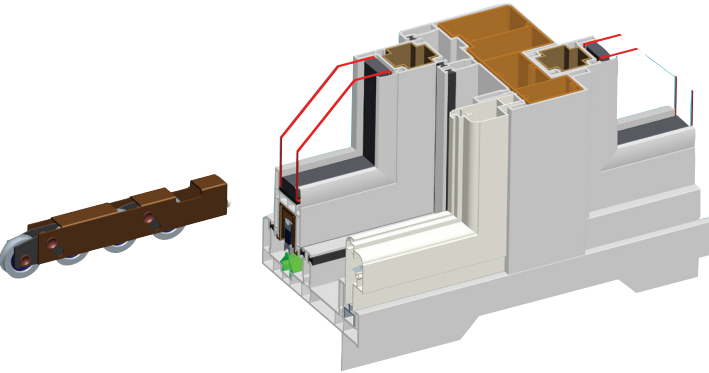
OXO SLIDING PATIO DOOR



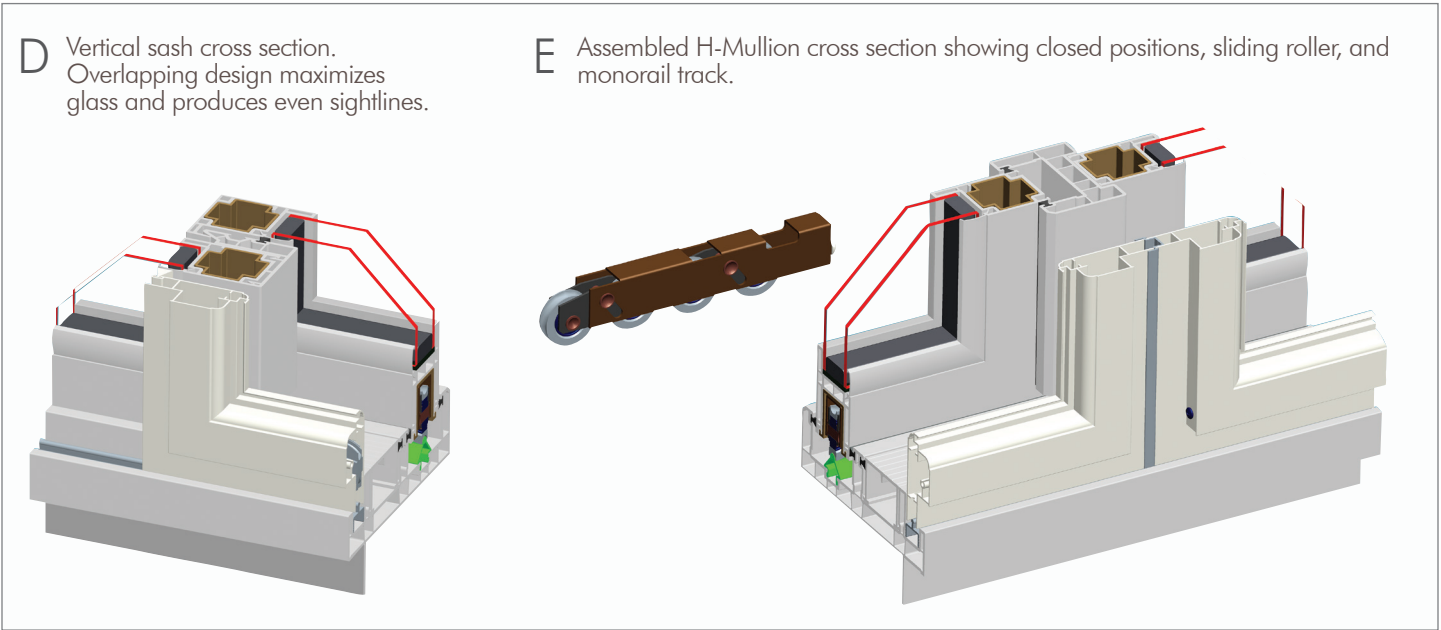
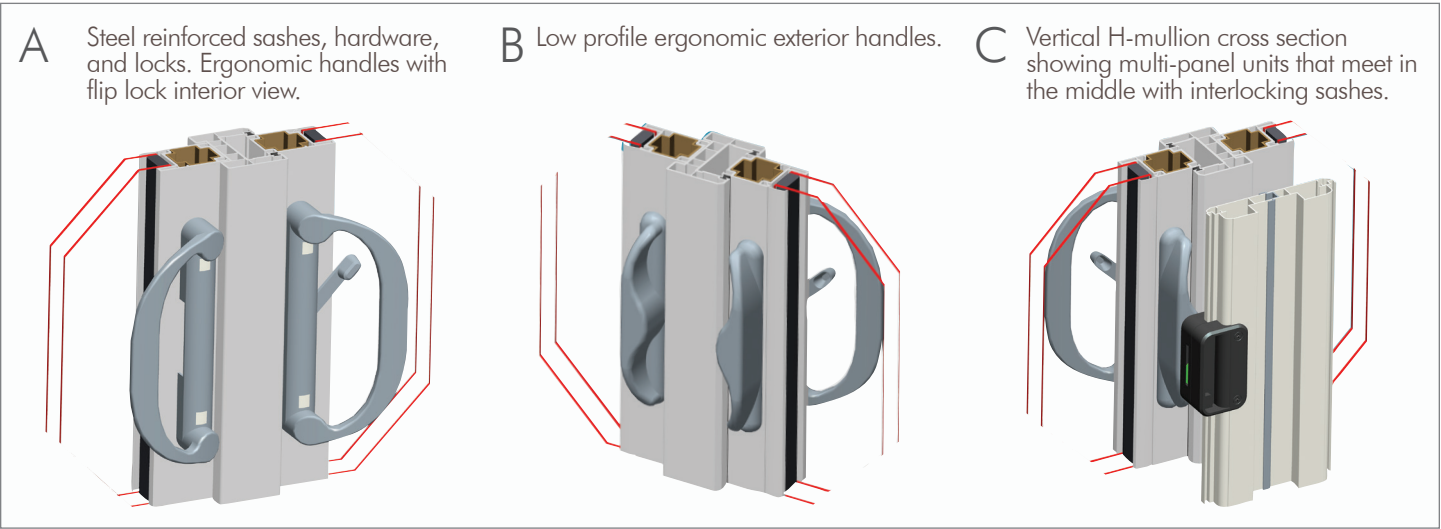
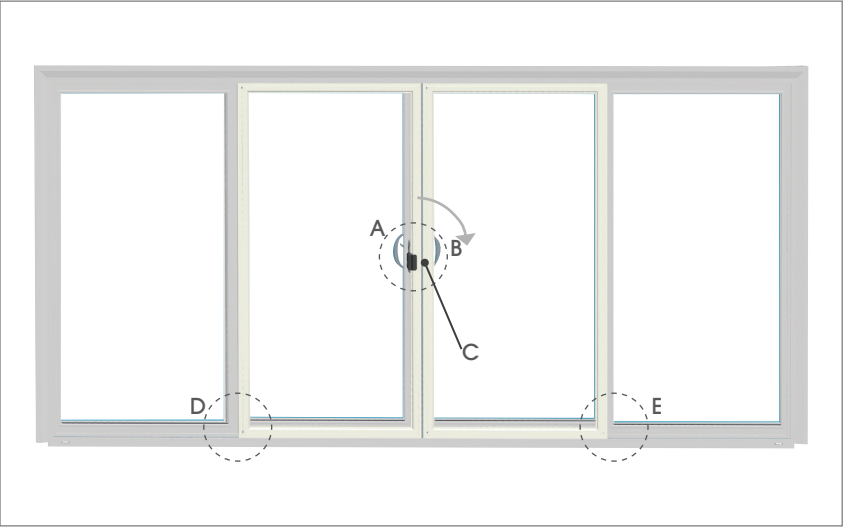
A Steel reinforced sash and lock. Low profile aluminum screen.



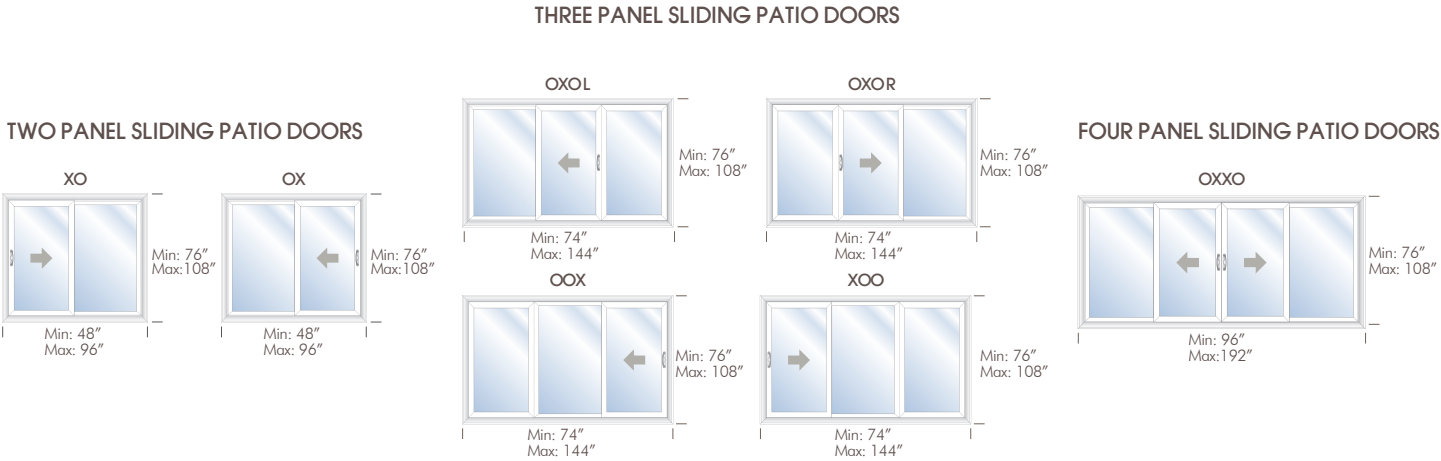
C Assembled mullion cross section showing closed positions, sliding roller, and monorail track.



OXXO SLIDING PATIO DOOR



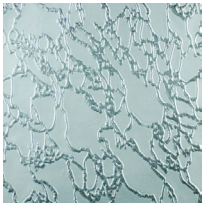
SLIDING PATIO DOORS STYLING



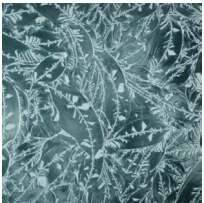
CUSTOM OPTIONS: SPECIALTY GLASS AND GRIDS

PATTERN & COLOR GLASS SELECTION

Our variety of pattern glass designs preferred options for bathrooms, add character, privacy and dimension to windows or doors. Bronze and gray glass are also available.



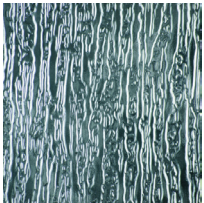
Delta Frost



Glue Chip



Obscure



Rain



Bronze

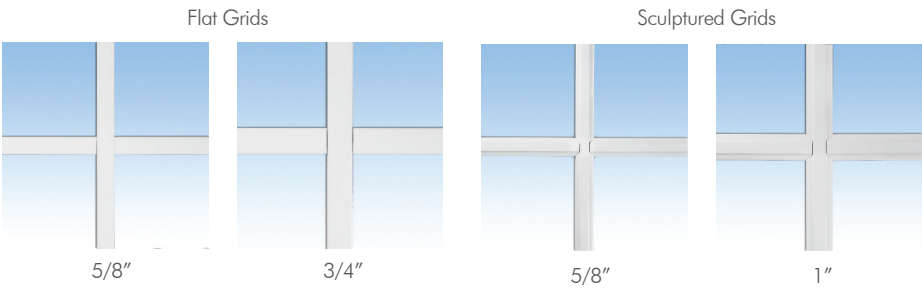


Gray

Other glass patterns available upon request. Please contact your Sales Representative for more details.

GRID OPTIONS

Add an elegant element to your windows and doors with a grid design. With several patterns to choose from and the benefit of having the grids placed inside the insulated glass unit, cleaning your windows is easy and convenient.



Available grid patterns, Marginal, Double Prairie and Colonial

ecotech
WINDOWS & DOORS

IMPERIAL
windows & patio doors
series im-2100

PROUDLY MADE
IN THE USA 



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