



# Residential Guide





Great design lives here.



## Professional installation matters.

By selecting a trusted installer that specializes in windows and doors, you are ensuring:

- You have an expert guiding you through the options available, for aesthetics and performance
- Precise measurements of the openings, with products custom made to fit
- Careful removal of old products to avoid damage to stucco, plaster, etc.
- The installation details are appropriate for your home's construction
- The products will be sealed, shimmed and insulated properly
- Square installation for smooth operation of windows and doors
- Quicker installation and completion of the project



Contact us to find a Preferred Dealer in your area.

### TYPES OF INSTALLATIONS FOR RENOVATIONS



#### FULL FRAME REPLACEMENT

Appropriate in most settings, where the entire existing window is replaced, including the exterior brickmould and the interior casing.



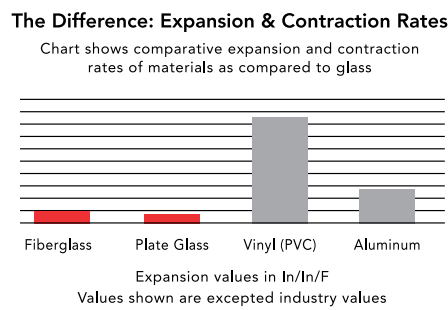
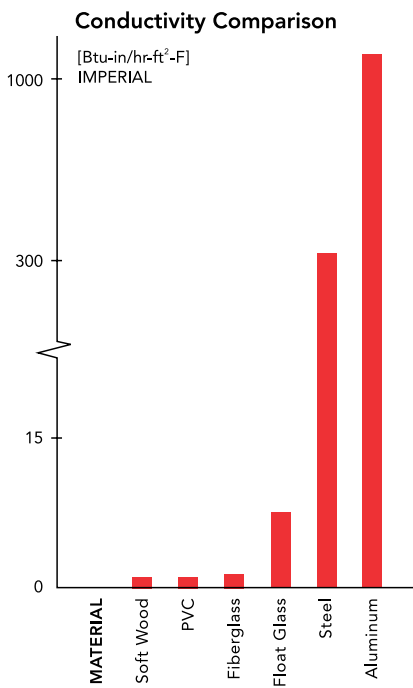
#### INSERT

Appropriate in historical settings where you wish to maintain the exterior and/or interior trim. The brickmould, frame, and interior casing remain in place, while a new window is inserted into the existing frame.

# Why Fiberglass?

## The glass on glass advantage

Pultruded fiberglass is an engineered material that is created through a process where strands of glass and glass matting are pulled through a heated die. The glass is bonded with resin as it passes through a die at extremely high temperatures. The result is a very strong, stable, insulating material well-suited to windows and doors. Fiberglass lineals are painted with an architectural coating to add any colour to the finished product.





## CONSIDER THE ADVANTAGES OF PULTRUDED FIBERGLASS

### STABILITY

Pultruded fiberglass has a very low rate of expansion and contraction, especially in comparison to vinyl, or PVC (polyvinyl chloride). A more stable frame material maintains the seal through seasonal temperature fluctuations, due to the reduced relative movement between the frame and the glass.

### ENVIRONMENTAL CONSIDERATIONS

Fiberglass features the lowest embodied energy (low energy consumption in lineal production) when compared to other common window frame materials, as well as providing the longest life expectancy.

### STRENGTH

A well-engineered fiberglass window demonstrates vastly superior strength characteristics when compared to other windows, like PVC. Fiberglass supports large insulating glass units, allowing you to create a stunning wall of glass.

### ENERGY EFFICIENCY

Pultruded fiberglass materials have MUCH lower conductivity than materials such as aluminum. Insulated frame and sash components reduce the conductivity, allowing for the creation of some of the most energy efficient details in the world.

### LOW MAINTENANCE

Fiberglass is an extremely stable material that does not rot or require regular maintenance like wood.

### ANY COLOUR, INSIDE AND OUT

Architectural coatings can be applied in ANY colour, on the interior and exterior.

### DURABILITY

Fiberglass is an extremely stable material predicted to last about 40% longer\* than PVC windows.

*\*Study from the University of British Columbia, "Life cycle assessment case study of North American residential windows" by James Salazar.*

The process begins with glass roving and mat

This resin-soaked glass fiber matrix is pulled through heated dies

The lineals are made to specific window and door profiles

Your choice of colour is then applied





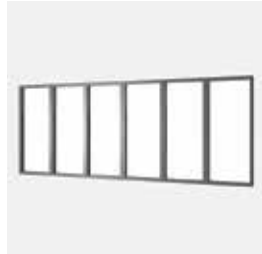
# Style options

## Windows



### LO & HI PROFILE FIXED

Picture windows available in either a Lo Profile for maximum glass, or Hi Profile to match the sight lines of a flanking operable window.



### FIBERWALL™ FIXED

Robust collection of picture windows to suit standard punched openings up to stunning walls of glass.



### CASEMENTS & AWNINGS

Outswing windows with an excellent compression seal. Includes the NEW Series 328 and 458 FiberWall™ Operator.



### EURO-STYLE TILT + TURNS

European-style dual-functioning inswing windows and doors.



### SINGLE HUNG

Vertical sliding windows with a fixed top sash and a moveable bottom sash.



### DOUBLE HUNG

Vertical sliding windows with a moveable top and bottom sash.



### SLIDERS

Horizontal sliding windows for easy access to fresh air.



### INSWING CASEMENTS, HOPPERS & FIXED WINDOWS

European-style inswing windows provide for easy cleaning access.



### BAYS & BOWS

Angled window combination that projects outward, adding light and space.



### CUSTOM SHAPES

Any shape from round to angular to 90 degree corner.

## Doors



### SWINGING DOORS

Make a statement with your doors. FiberWall™ Swinging Doors can project any style, with amazing size capabilities and finish flexibility.



### SLIDING DOORS

Sliding doors maximize your floor area by not having panels swinging into the room or out onto your deck.



LO PROFILE WITH CASEMENTS



HI PROFILE WITH CASEMENTS

## Series 328: Lo & Hi Profile Fixed

Clean, contemporary frames for fixed (picture) windows. This series includes a Lo Profile frame, allowing for maximum glass area, and a Hi Profile frame, matching the sight lines of an operable window.

### FEATURES

- Slim Lo Profile sight lines for a minimized frame and maximized glass
- Attractive Hi Profile frame effectively and economically mimics an operable window
- Flat drainage caps maximize performance without compromising aesthetics
- Industry-leading thermal performance to reduce heating/cooling costs.

### LO PROFILE



### HI PROFILE



### DESIGN TIP

## Maximum Glass or Perfect Symmetry?

Looking for maximum glass? Choose a Lo Profile Fixed. Or, if you want symmetry, choose a Hi Profile Fixed, which will perfectly match the look of a casement or awning window.

# Series 458/658: FiberWall™

For dramatic walls of glass, select from Series 458 or 658. With deeper, more robust frames, FiberWall™ can deliver large sizes without dividing up the glass, all with an insulated frame and true triple pane performance for cold climates.

## FEATURES

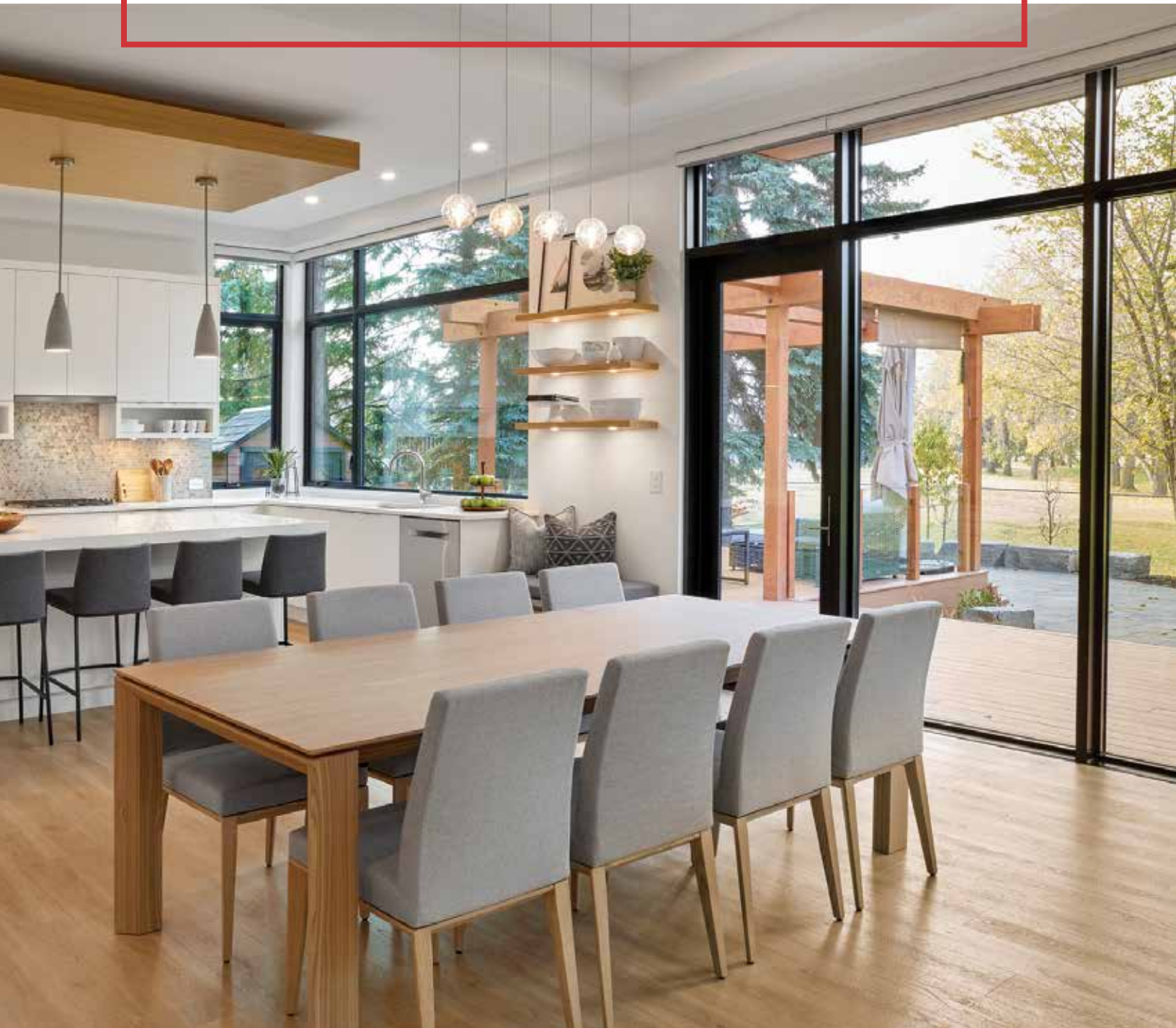
- Ultra-slim sight lines
- Clean crisp details
- Delivers expansive views without dividing up the glass
- Easily combines with casements, awnings, and swinging doors
- Flat drainage caps maximize performance without compromising aesthetics
- Industry-leading thermal performance to reduce heating/cooling costs





**DESIGN TIP**

At the back of the house, enlarge the opening and bring in more light with a swinging door and big pieces of glass leading onto the patio.



*Pictured above Habitat Studio*

Series 458/658:  
FiberWall™

Everitt Design Associates Limited





**DESIGN TIP**

## Big Glass

Transform the interior space with an expansive and unobstructed view. With a single piece of glass available up to 12 x 7 feet, you can take a large opening and fill it with glass instead of dividing it.



## Series 328/458: Casements & Awnings

Casements and Awnings are the most sleek-looking, highest performing venting windows available today. With strong, insulated fiberglass frames and tight compression seals, these series offer excellent air tightness and thermal performance to reduce your heating/cooling costs. The unobstructed view and smooth-operating hardware makes the series an excellent choice for a venting window.

### FEATURES

- Engineered for long term durability
- Robust sash supports triple pane glazing
- Heavy-duty multi-point locking hardware
- Heavy-duty steel roller hinge for largest sizes
- Triple automotive weatherstripping

### HARDWARE



### DESIGN TIP

## Simulated Divided Lites

Casements can be an excellent alternative to Single Hungs with the use of Simulated Divided Lites (SDLs). The heritage style is maintained with historical divisions of the glass, while the energy performance is significantly improved with the compression (rather than sliding) seal.







**DESIGN TIP**

## Kitchen Window

Turn the kitchen window into one large awning with no divisions in the glass. Designed for sizes up to 25 square feet, the awning is a perfect solution to get maximum fresh air and the best view.

**EGRESS REQUIREMENTS**

An egressable window is a venting window required by building code for emergency escape in bedrooms. Casements often meet the square footage and minimum clear opening width and height, although occasionally you may need it enlarged in the case of older homes.



## Series 850: Single Hungs

Single Hung windows beautifully complement the character of heritage buildings, while delivering the durability and superior longevity of a fiberglass frame. The bottom sliding sash circulates fresh air and tilts inwards for easy cleaning. The fixed top sash creates a cost-effective option compared to a Double Hung, while increasing the energy efficiency.



### FEATURES

- Lift hardware for easy, long-life operation
- Double weatherstripping
- Bottom sash tilts for easy cleaning
- Traditional design and sight lines
- Exterior screen

### DESIGN TIP

## Reclaim Stained Glass

Some homes have beautiful stained glass, and while homeowners wish to upgrade the performance of the windows, they do not want to lose the detailing. Depending on the condition, it is possible to re-use the stained glass and turn it into a new triple pane unit, or replicate and have it made anew.

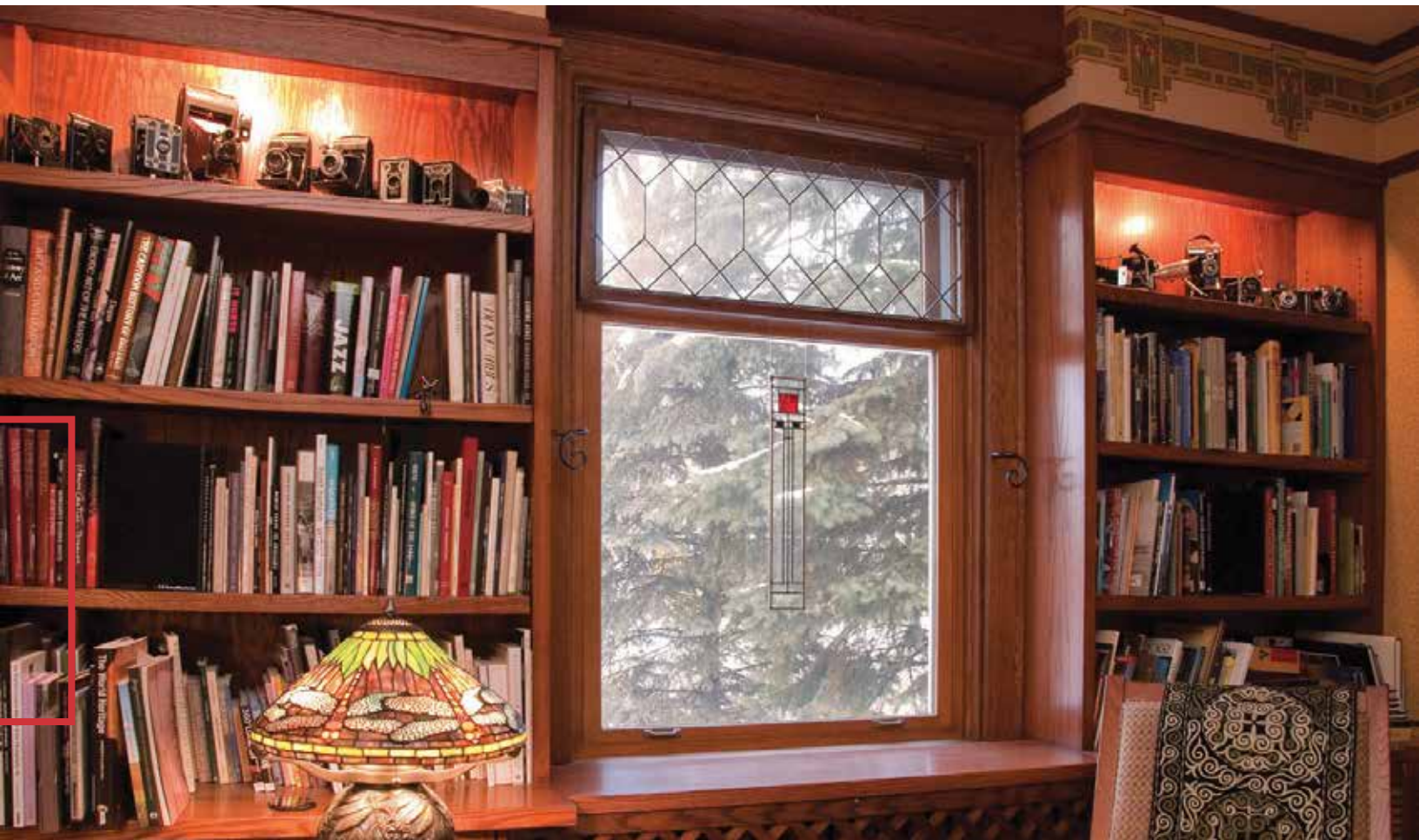


## Series 900: Double Hungs

Double Hung windows beautifully complement the character of heritage buildings, while delivering the durability and superior longevity of a fiberglass frame. Both the top and bottom sliding sashes tilt inward for easy cleaning.

### FEATURES

- Lift hardware for easy, long-life operation
- Double weatherstripping
- Top and bottom sashes tilt for easy cleaning
- Traditional design and sight lines
- Exterior screen





## Series 800: Horizontal Sliders

In situations where a swinging sash is not practical, sliders are an excellent choice as they do not occupy any exterior or interior space. The fiberglass sash glides smoothly over a low-resistance track for easy operation.

### FEATURES

- Low-resistance gliding track
- Resilient hardware
- Exterior screen



## Bays & Bows

Bays and bows beautifully open up a room with additional space and light by projecting outward from a wall. Bay windows are traditionally made from 3 windows, while bows are made from 4 or more, creating a gentle curve.

### FEATURES

- Slim, insulated mullions
- Custom insulated angles
- Fixed frame alternatives:
  - Lo Profile maximizes your view
  - Hi Profile creates matching sight lines with Casements/Awnings





## Series 700: Hoppers

These windows provide for excellent venting and easy cleaning access. The inswing design does not interfere with any exterior features, and are typically used in basement applications. A hopper may meet egress requirements more easily for smaller openings as the full size of the sash swings open.

### FEATURES

- Inward swinging sash with exterior screen
- Rotating lever that locks into a keeper
- Easy cleaning access
- Complete with matching fixed frame

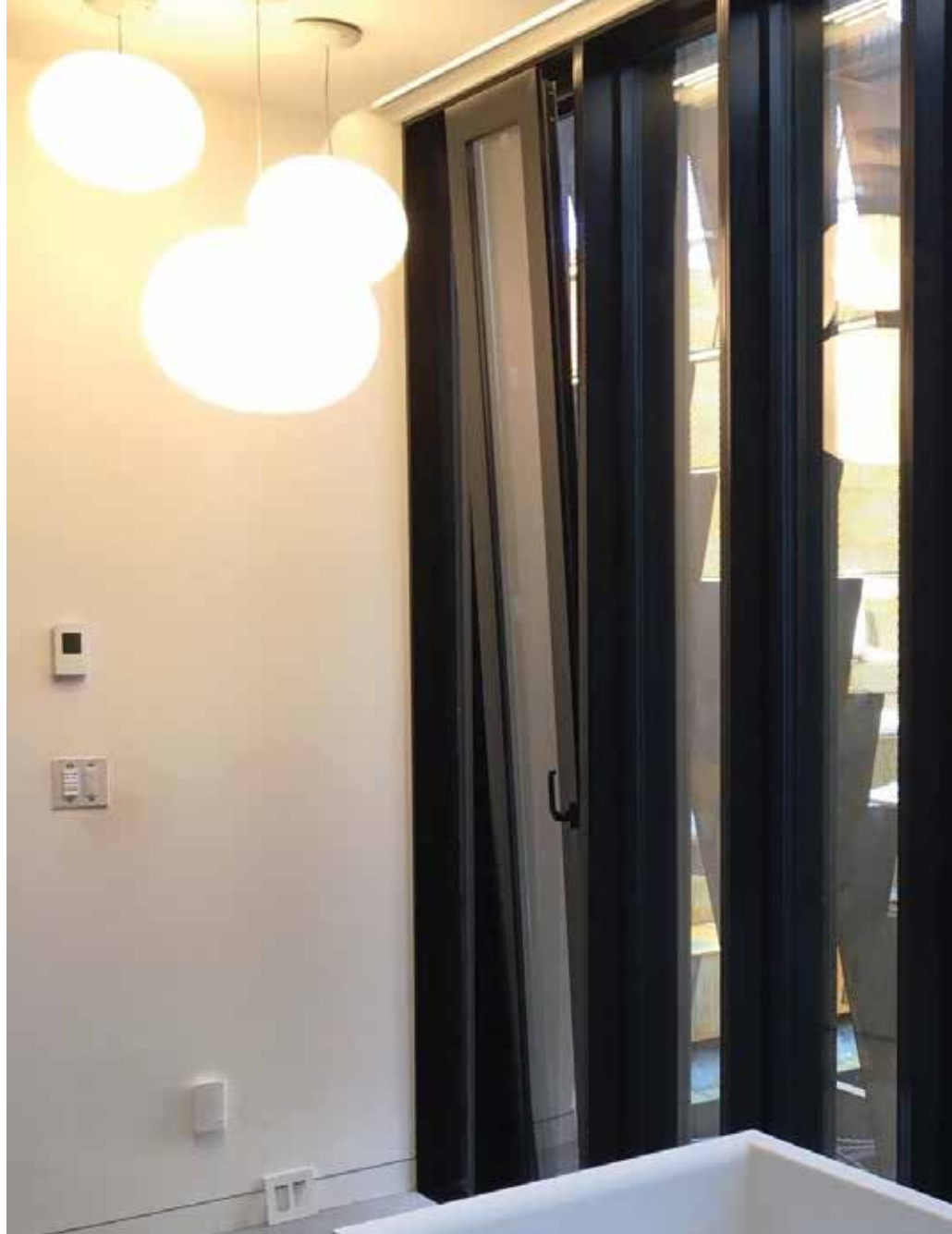


## Series 300: Euro-Style Tilt + Turns

Tilt + Turns are European-style windows and doors that open by either tilting the top inwards, or swinging the unit open into the room. With a multi-point locking mechanism, this window offers superior air tightness and resistance to water penetration. The inswing design does not interfere with any exterior features, and allows for easy cleaning.

### FEATURES

- Inward swinging sash with exterior screen
- Tilts or swings open for lots of fresh air
- Excellent compression seal
- Strong fiberglass frame allows large door sizing



### TILT + TURN : MULTI-FUNCTIONAL WINDOWS AND DOORS

LEFT Inward swing operation  
RIGHT Inward tilt operation





# Custom

From rake heads and peak heads that follow the slope of the roof line, to featured curve-top windows, to anything out of the ordinary, DUXTON specializes in accommodating unique window needs.

## FEATURES

- Durable insulated fiberglass frames
- Custom angles and curves
- Very large units and configurations achievable
- Custom grills available



BEFORE



## Series 458D/658D: Swinging Doors

Make a statement with your doors. FiberWall™ Swinging Doors can project any style, with amazing size capabilities and finish flexibility. With a rigid insulated fiberglass frame, a high quality fiberglass panel, and even multi-point locks, FiberWall™ delivers excellent thermal performance and durability. For major impact and natural light, consider a door within a wall of glass using complementary FiberWall™ windows.

FOR MORE IDEAS, CHECK OUT OUR SWINGING DOOR CATALOGUE.



**FEATURES**

- Strong pultruded fiberglass frame
- Smooth or Woodgrain insulated fiberglass panels
- Low maintenance, thermally broken sill that won't rot
- Lo-Profile Inswing Sill
- Heavy duty ball bearing hinges
- Dual or triple pane glazing

**FUNCTIONAL OPTIONS**

- Fixed or Venting Sidelites, such as Garden Doors
- Fixed or Electric Opening Awning Transoms
- Astragals for Double Doors to leave a wide, clear opening
- Disappearing Screens, Storm Doors, or Mini-Blinds options

**DESIGN TIP**

**Multi-Point Locks**

A customer favourite, multi-point locks offer 3 latches, top, middle, and bottom, instead of the usual single latch in the middle. With the weight of the door and the multi-point lock, the door feels much more secure.



## Series 550: Sliding Doors

Series 550 Ultra Sliding Doors maximize your floor area by not having panels swinging into the room or out onto your deck. With a sliding screen, the door also allows for lots of fresh air. Available with triple pane glazing, and a double saddle seal, this sliding door offers industry-leading performance. Extra large sizes are available to bring the outside in, and open up your space with natural light.

### FEATURES

- Strong fiberglass insulated frame and interlock
- 2-Panel, 3-Panel, and 4-Panel configurations available up to 10' tall
- Custom sizing up to 40 square feet per panel
- Air-tight double saddle seal
- High quality steel rollers
- Exterior screen
- Keyed lock and footlock





**DESIGN TIP****Black Interior  
Colour**

Black is a huge trend, and fiberglass offers the finish option inside AND out. Used in heritage and contemporary homes alike, black is bold, striking, and adds definition to the windows and doors.



# Sliding Door Hardware



CONTEMPORARY BLACK



CONTEMPORARY FAUX OIL RUBBED BRONZE



CONTEMPORARY SATIN NICKEL



STANDARD BLACK



STANDARD BROWN



STANDARD WHITE

## Obscured Glass Options

### Privacy Level

- Clear
- Semi-private
- Private



MIST



NARROW REED



RAIN



SANDBLASTED



WIDE REED



# Insulating Glass

DUXTON offers the widest range of insulating glass options to suit almost any requirement. We provide our customers with exceptional value and durability (20 year Limited Warranty), warm edge spacers, argon gas fill, and a family of LoE options.

- Dual Pane (typically 7/8" OD) or Triple Pane (typically 1 3/8" OD)
- Warm edge stainless steel spacer
- Argon gas fill in all cavities
- Choice of 1 or 2 LoE coatings
- Choice of LoE coating type
- 20 Year Limited Warranty

## MID-RANGE LO-E 272

As the most popular choice amongst coatings, Lo-E 272 delivers year-round comfort in all types of weather. In the winter, it reflects heat back into the room. In summer, it rejects the sun's heat and damaging UV rays. With two layers of silver applied to the glass, this coating offers excellent insulation values with great visibility.

## SOLAR BLOCK LO-E 366

Lo-E 366 is an excellent solution that prevents summertime overheating problems and excessive cooling loads. With three layers of silver applied to the glass, this coating delivers excellent insulation values and solar heat gain control, while maintaining good visibility.

## SOLAR GAIN LO-E 180

Solar Gain Lo-E 180 is an excellent product for passive solar applications. It blocks heat loss, while letting the sun's heat stream inside. LoE-180 also lets in more light than ordinary Lo-E products – turn off artificial lighting and enjoy natural light.

## Compare Visible Light Transmittance

Lo-E coatings combined with clear glass in a dual pane



CLEAR | LOE 180



CLEAR | LOE 272



CLEAR | LOE 366

# Exterior Options

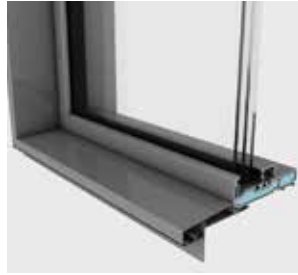
## Perimeters

Select from a variety of aluminum perimeters, which are attached to the exterior of the frame for installation purposes.



### NARROW

Simple, slim, most common choice of nailing fin



### NEW WIDE

Nailing fin that sets the window deeper into the wall, creating elegant shadow lines



### 250 PANNING

Nailing fin that protrudes outwards 2 1/2" to accommodate rigid insulation or other finishing exterior details such as brick

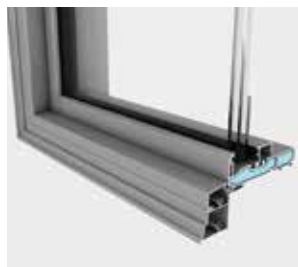


### 350 PANNING

Nailing fin that protrudes outwards 3 1/2" to accommodate rigid insulation or other finishing exterior details such as brick

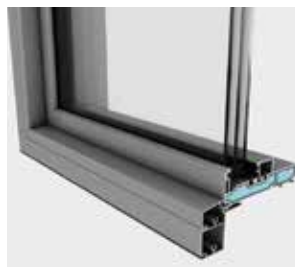
## Brickmoulds

Select from a variety of aluminum brickmoulds, used in renovation projects to cover installation screws, or to emphasize the windows by outlining the frame.



### PROFILED

Capping piece with elegant shadow lines that mimic millwork



### FLAT

Capping piece with simple, clean lines



### PROFILED WITH SILL PERIMETER

Mimics original wood windows, with a Sill Perimeter on the bottom, and Narrow Perimeter with Profiled or Flat Brickmould on three sides.



# Interior Options

## Factory-applied jamb extensions



1/2" DRYWALL RETURN U-CHANNEL



3/4" DRYWALL RETURN U-CHANNEL

### DRYWALL RETURN

A simple, clean detail, allowing the drywall to return to the window. Available in white only.



PACIFIC COAST HEMLOCK



OAK

### WOOD

Real wood options to add a richness to the window. All wood interior options come unfinished, for the customer to stain or paint as they wish. Choose from Pacific Coast Hemlock, Oak, or request a custom wood type.



WHITE CELLULAR PVC

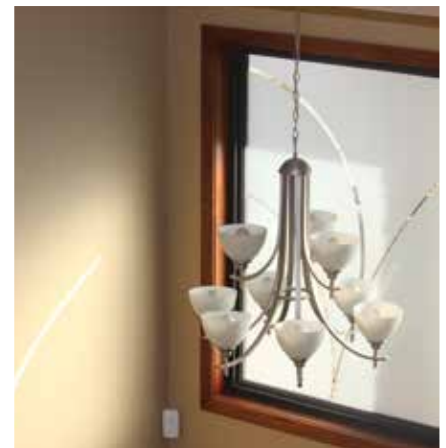
### CELLULAR PVC

A low maintenance, pre-finished white interior finish that resists moisture.

### DESIGN TIP

## Rich Interior Colour

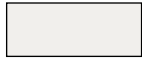
Consider a richer interior colour rather than simply white. An Espresso coloured frame with a Pacific Coast Hemlock (PCH) real wood jamb is a combination of standard options, but looks anything but standard. This can beautifully replace wood windows in a renovation, and create a natural warmth and texture in a new home.



# Colour Options

## STANDARD

White



Espresso



## PREMIUM

Almond



Slate



Brownstone



Black



Charcoal



Chestnut



DUXTON Red



Cranberry



Brick Red



Cedar



Sage Green



Evergreen



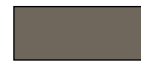
Steel Blue



Midnight Blue



Bronze



Silver



## STAINS

Cherry Red

Cherry Red Stain  
on Cherry Grain



Cherry Red Stain  
on Fir Grain



Cherry Red Stain  
on Oak Grain



Cocoa

Cocoa Stain  
on Cherry Grain



Cocoa Stain  
on Fir Grain



Cocoa Stain  
on Oak Grain



Hazelnut

Hazelnut Stain  
on Cherry Grain



Hazelnut Stain  
on Fir Grain



Hazelnut Stain  
on Oak Grain



Honey

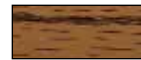
Honey Stain  
on Cherry Grain



Honey Stain  
on Fir Grain



Honey Stain  
on Oak Grain



Smoke

Smoke Stain  
on Cherry Grain



Smoke Stain  
on Fir Grain



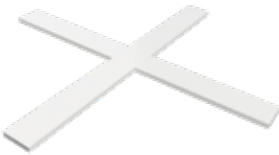
Smoke Stain  
on Oak Grain



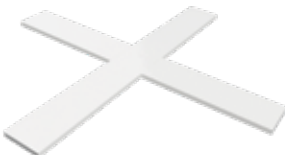
Stains apply to woodgrain door panels only. Colours may not appear exactly as shown. Woodgrain door panels are available in any stain colour, but select grain types.



# Simulated Divided Lites (SDLs)



FLAT 3/4"



FLAT 1"



FLAT 1 1/2"



FLAT 2"



FLAT 3"



PROFILED 7/8"



REAL WOOD 3/4"  
(INTERIOR ONLY)

Simulated Divided Lites offer the most impact, as they are applied on the surface of the glass (interior and exterior), with internal grills inserted between the glass panes for added depth. SDLs offer an excellent solution when the aim is to replicate true divided lites.

Choose from flat, profiled, or a combination of flat and profiled to replicate a simulated sash. Available in ANY Standard or Premium Colour.



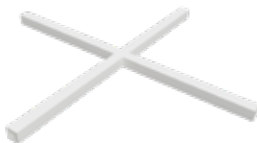
# Internal Grills (IGs)

Internal Grills offer an easy-to-clean, cost effective solution for adding a grill pattern to your windows and doors.

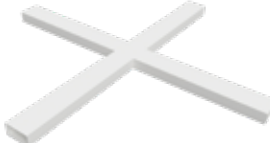
Choose from a variety of flat or profiled IGs.

### INTERNAL GRILLS AVAILABLE:

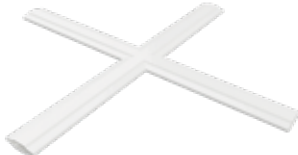
Some options will differ by product line, contact us for more information.



FLAT 5/16"  
Available in White, Black, Bright Gold or Pewter



FLAT 5/8"  
Available in White, Espresso, Black, Brownstone, or Bright Gold



PROFILED 11/16"  
Available in White, Espresso, Black, or Brownstone





# Performance Values

## Insulating Glass Performance Values

Glass type	Application	Gas	Centre-of-Glass		Overall Window		
			R-Value	U-Value (metric)	U-Value (imperial)	Heat Gain	Visible Light
<b>Dual Pane</b>							
Cardinal LoE-180	High Solar Gain	Argon	3.85	1.59	0.28	0.61	70%
Cardinal LoE-272	Mid-Range	Argon	4.00	1.53	0.27	0.36	63%
Cardinal LoE-366	Low Solar Gain	Argon	4.17	1.48	0.26	0.24	57%
<b>Triple Pane - 1 LoE Coating - High Performance</b>							
Cardinal LoE-180	High Solar Gain	Argon	5.56	1.14	0.20	0.54	64%
Cardinal LoE-272	Mid-Range	Argon	5.26	1.14	0.20	0.34	58%
Cardinal LoE-366	Low Solar Gain	Argon	5.56	1.14	0.20	0.22	52%
<b>Triple Pane - 2 LoE Coatings - Ultra High Performance</b>							
Cardinal LoE-180 and 180	High Solar Gain	Argon	7.69	0.91	0.16	0.50	61%
Cardinal LoE-272 and 180	Mid-Range	Argon	7.69	0.85	0.15	0.33	56%
Cardinal LoE-272 and 272	Mid-Range	Argon	7.69	0.85	0.15	0.31	51%
Cardinal LoE-366 and 180	Low Solar Gain	Argon	7.69	0.85	0.15	0.22	50%
Cardinal LoE-366 and 366	Low Solar Gain	Argon	8.33	0.79	0.14	0.21	41%

Performance Values reflect FiberWall™ Series 328FX and are calculated by certified 3rd party labs. Information is gleaned from best available industry sources. The reader is cautioned that test results should be used for comparison purposes only. Results are size and installation dependent. In-service performance can be significantly different from those shown. Product tested indicates design potential. Model size was 1200 mm x 1500 mm, with no thermal breaks, which are not required in fiberglass frames due to the lower relative conductivity compared to aluminum.

### DUXTON LIMITED WARRANTY

The strength of pultruded fiberglass leads to a high level of confidence backed by a **Limited 20 Year Warranty** on the frame components and typically 20 years on the insulating glass.

Hardware and other components are also backed by confident warranties and after sales service.



**LIVING  
BUILDING  
CHALLENGE**



Maison Design Build





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